

RESTRICTED

7

# MONTHLY PROGRESS REPORT ★ SECTION

Director  
General Medicine  
Tuberculosis Treatment  
Communicable Dis. Treatment

Director  
General Medicine  
Tuberculosis Treatment  
Communicable Dis. Treatment

SEMIC 720

# HEALTH

CLASSIFIED CODE  
RESTRICTED  
DEC 13 1946  
JAN 10 1947  
ROBERT C. FERGUSON,  
Asst. Security Officer, SSB



OK

ARMY  
MEDICAL  
DEC 20 1946  
LIBRARY

~~SECRET~~

28 FEBRUARY 1945

32

~~SECRET~~  
S.G.O. No. 64463  
#17

ARMY MEDICAL LIBRARY  
WASHINGTON, D. C. U. S. A.



WAR DEPT - S. G. O.  
IN  
APR 18 AM 10:25



# HEALTH

THIS DOCUMENT CONTAINS  
INFORMATION AFFECTING THE  
NATIONAL DEFENSE OF THE  
UNITED STATES WITHIN THE  
MEANING OF THE ESPIONAGE  
ACT, 50 U. S. C., 31 AND 32, AS  
AMENDED. ITS TRANSMISSION  
OR THE REVELATION OF ITS  
CONTENTS IN ANY MANNER  
TO AN UNAUTHORIZED PERSON  
IS PROHIBITED BY LAW.

OFFICE OF THE SURGEON GENERAL

HEADQUARTERS, ARMY SERVICE FORCES, WAR DEPARTMENT



## DISTRIBUTION LIST \*

### SECRETARY OF WAR

Secretary of War  
Under Secretary of War  
Bureau of Public Relations

### CHIEF OF STAFF

Deputy Chief of Staff  
Secretary, General Staff  
Statistics Branch  
Strength Accounting and Reporting Office  
A. C. of S., G-1  
A. C. of S., G-3  
A. C. of S., G-4  
Budget Division  
Civil Affairs Division  
The Inspector General  
Special Planning Division  
War Department Manpower Board

### ARMY GROUND FORCES

#### ARMY AIR FORCES

Chief of Air Staff  
Management Control  
A.C. of A.S., Operations, Commitments, and Requirements  
Troop Basis Division  
A.C. of A.S., Personnel  
Military Personnel Division  
The Air Surgeon  
Office of Flying Safety  
AAF School of Applied Tactics  
Aviation School of Medicine

#### ARMY SERVICE FORCES

Commanding General  
Chief of Staff  
Deputy Chief of Staff for Service Commands  
Intelligence Division  
National Guard Bureau  
Provost Marshal General  
Service Commands  
Director, Control Division  
Director of Plans and Operations  
Planning Division  
Requirements and Stock Control Division  
Director of Materiel  
Purchases Division  
Director of Supply  
Maintenance Division  
Director of Personnel  
Chief of Chaplains  
Executive for ROTC and Reserve Affairs  
Industrial Personnel Division  
Information and Education Division  
Military Personnel Division  
Special Services Division  
Director of Military Training  
School Division  
Troop Training Division  
Fiscal Director  
The Judge Advocate General  
Chief of Chemical Warfare Service  
Chief of Engineers  
Chief of Ordnance  
Chief Signal Officer  
Chief of Transportation  
The Surgeon General  
Field Installations  
Command and General Staff School

#### OVERSEAS

Commanding General, ETOUSA  
Commanding General, Communications Zone, ETOUSA  
Commanding General, Iceland Base Command  
Commanding General, USAF - MTO  
Commanding General, USAF - ME  
Commanding General, Services of Supply, SWPA  
Commanding General, USAF - POA  
Commanding General, USF - Burma-India  
Commanding General, Alaskan Department  
Commanding General, Caribbean Defense Command

#### OTHER AGENCIES

Army and Navy Staff College  
British Joint Staff Mission  
Bureau of the Budget  
Canadian Army Staff

\* MPR distribution is governed by ASF Manual M 703-8

MPR:7



# CONTENTS

	Page
SUMMARY . . . . .	1
DISEASE AND INJURY	
Battle Casualties in European Theater . . . . .	2
Cold Injury in Pacific Areas . . . . .	6
Neuropsychiatric Problems	
In Southwest Pacific Area . . . . .	7
Of II Corps in Italy . . . . .	10
Noneffective Rates	
Overseas Theaters, Total Rates . . . . .	11
Overseas Theaters, Major Components . . . . .	12
U. S. and Overseas Total . . . . .	13
Admission Rates, U. S. and Overseas . . . . .	14
Health of Prisoners of War in the U. S. . . . .	15
Treatment of Venereal Disease . . . . .	16
Dental Health . . . . .	19
Patients Returned to Duty in Overseas Theaters . . . . .	20
Health Briefs . . . . .	23
HOSPITALIZATION	
Hospitalization	
All Overseas Theaters . . . . .	24
European Theater . . . . .	28
Evacuation	
All Theaters . . . . .	31
Individual Theaters, By Means of Transportation . . . . .	32
Hospitalization in the Z/I . . . . .	33
MISCELLANEOUS	
Induction Rejections . . . . .	38
STATISTICAL TABLES	
Wounded in Action . . . . .	41
Disease and Nonbattle Injury . . . . .	42
Venereal Disease and Malaria . . . . .	43
Respiratory Disease and Diarrhea and Dysentery . . . . .	44
Fever of Unknown Origin and Neurological and Neuropsychiatric Disorders . . . . .	45

CONTENTS

1	FOREWORD
2	1. INTRODUCTION
3	2. THE PROBLEM
4	3. THE SCOPE OF THE STUDY
5	4. THE METHODS
6	5. THE RESULTS
7	6. THE CONCLUSIONS
8	7. THE RECOMMENDATIONS
9	8. THE SUMMARY
10	9. THE BIBLIOGRAPHY
11	10. THE APPENDICES
12	11. THE INDEX
13	12. THE LIST OF ILLUSTRATIONS
14	13. THE LIST OF TABLES
15	14. THE LIST OF FIGURES
16	15. THE LIST OF REFERENCES
17	16. THE LIST OF ABBREVIATIONS
18	17. THE LIST OF SYMBOLS
19	18. THE LIST OF UNITS
20	19. THE LIST OF DEFINITIONS
21	20. THE LIST OF NOTES
22	21. THE LIST OF REFERENCES
23	22. THE LIST OF ABBREVIATIONS
24	23. THE LIST OF SYMBOLS
25	24. THE LIST OF UNITS
26	25. THE LIST OF DEFINITIONS
27	26. THE LIST OF NOTES
28	27. THE LIST OF REFERENCES
29	28. THE LIST OF ABBREVIATIONS
30	29. THE LIST OF SYMBOLS
31	30. THE LIST OF UNITS
32	31. THE LIST OF DEFINITIONS
33	32. THE LIST OF NOTES
34	33. THE LIST OF REFERENCES
35	34. THE LIST OF ABBREVIATIONS
36	35. THE LIST OF SYMBOLS
37	36. THE LIST OF UNITS
38	37. THE LIST OF DEFINITIONS
39	38. THE LIST OF NOTES
40	39. THE LIST OF REFERENCES
41	40. THE LIST OF ABBREVIATIONS
42	41. THE LIST OF SYMBOLS
43	42. THE LIST OF UNITS
44	43. THE LIST OF DEFINITIONS
45	44. THE LIST OF NOTES
46	45. THE LIST OF REFERENCES
47	46. THE LIST OF ABBREVIATIONS
48	47. THE LIST OF SYMBOLS
49	48. THE LIST OF UNITS
50	49. THE LIST OF DEFINITIONS
51	50. THE LIST OF NOTES
52	51. THE LIST OF REFERENCES
53	52. THE LIST OF ABBREVIATIONS
54	53. THE LIST OF SYMBOLS
55	54. THE LIST OF UNITS
56	55. THE LIST OF DEFINITIONS
57	56. THE LIST OF NOTES
58	57. THE LIST OF REFERENCES
59	58. THE LIST OF ABBREVIATIONS
60	59. THE LIST OF SYMBOLS
61	60. THE LIST OF UNITS
62	61. THE LIST OF DEFINITIONS
63	62. THE LIST OF NOTES
64	63. THE LIST OF REFERENCES
65	64. THE LIST OF ABBREVIATIONS
66	65. THE LIST OF SYMBOLS
67	66. THE LIST OF UNITS
68	67. THE LIST OF DEFINITIONS
69	68. THE LIST OF NOTES
70	69. THE LIST OF REFERENCES
71	70. THE LIST OF ABBREVIATIONS
72	71. THE LIST OF SYMBOLS
73	72. THE LIST OF UNITS
74	73. THE LIST OF DEFINITIONS
75	74. THE LIST OF NOTES
76	75. THE LIST OF REFERENCES
77	76. THE LIST OF ABBREVIATIONS
78	77. THE LIST OF SYMBOLS
79	78. THE LIST OF UNITS
80	79. THE LIST OF DEFINITIONS
81	80. THE LIST OF NOTES
82	81. THE LIST OF REFERENCES
83	82. THE LIST OF ABBREVIATIONS
84	83. THE LIST OF SYMBOLS
85	84. THE LIST OF UNITS
86	85. THE LIST OF DEFINITIONS
87	86. THE LIST OF NOTES
88	87. THE LIST OF REFERENCES
89	88. THE LIST OF ABBREVIATIONS
90	89. THE LIST OF SYMBOLS
91	90. THE LIST OF UNITS
92	91. THE LIST OF DEFINITIONS
93	92. THE LIST OF NOTES
94	93. THE LIST OF REFERENCES
95	94. THE LIST OF ABBREVIATIONS
96	95. THE LIST OF SYMBOLS
97	96. THE LIST OF UNITS
98	97. THE LIST OF DEFINITIONS
99	98. THE LIST OF NOTES
100	99. THE LIST OF REFERENCES



## SUMMARY

~~CONFIDENTIAL~~

CASUALTIES IN THE EUROPEAN THEATER December casualties were atypical with respect to the number of men declared missing, but otherwise parallel to those of the subsequent American counter-attack. In relation to the strength involved the rates of June, July, and August were still the highest in the experience of the theater at the end of January. By 12 February eight divisions had sustained casualties in excess of their T/O strength. See pages 2-5.

COLD INJURY IN THE PACIFIC Conditions in the islands of Japan and the northern portion of the Asiatic mainland are conducive to the development of trench foot and frost bite to a serious degree should winter operations be undertaken there. See page 6.

NEUROPSYCHIATRIC PROBLEM IN SOUTHWEST PACIFIC Higher than the rates for any other theater if the influence of combat activity is discounted, the neuropsychiatric admission rates of the Southwest Pacific Area suggest the need for a more effective rotation program. Admission rates are apparently highest in the rear areas. See pages 7-9.

NEUROPSYCHIATRIC PROBLEM IN ITALY Morale of men of the II Corps is described as low, reflecting lack of motivation and understanding with respect to their military mission. See page 10.

ADMISSIONS AND NONEFFECTIVES Nonbattle admission rates continue to be generally favorable overseas and quite favorable in the U. S. The noneffective rate reached 73 per 1,000 men in January in the European Theater, and 77 in the U. S. in February. Over 50 percent of the U. S. noneffective rate derives from evacuees. See pages 11-14.

TREATMENT OF VENEREAL DISEASE Improvements in the treatment of syphilis and gonorrhea have lowered average days lost per case from 42 in 1939 to 6.5 in 1944. The percentage of gonorrhea patients with complications has fallen from 28 percent in 1937 to one percent in 1944. See pages 15-17.

RATE OF RETURN TO DUTY OVERSEAS Comparative rates from various theaters demonstrate remarkable similarity among curves of hospital patients returning to duty, whether for wounded or for nonbattle patients. See pages 18-20.

HOSPITALIZATION OVERSEAS On 1 February T/O fixed bed capacity was well below WD authorized levels in the European, Mediterranean, Southwest Pacific, and Asiatic theaters but only in the European Theater was T/O fixed bed capacity especially crowded. There, however, the crowding was marked. See pages 24-27.

HOSPITALIZATION AND EVACUATION IN THE EUROPEAN THEATER Steps have been taken to ease the pressure upon the supply of fixed hospital beds in the European Theater. Actual evacuation since June is compared with expectation based on a 120-day policy, and forecasts are shown based on 90- and 120-day policies. See pages 28-30.

EVACUATION FROM OVERSEAS About 37,000 Army patients were debarked in the Z/I during February, 15 percent of whom arrived by air. Ships from the European Theater alone debarked 27,500, and lift is understood to be available for continued heavy evacuation from this theater. See pages 31-32.

HOSPITALIZATION IN THE U. S. During February there was a net gain of 18,000 patients in the general and convalescent hospital system, reflecting the increased flow of evacuees from overseas. Substantial progress was made during the month in extending convalescent capacity to meet current and projected needs. ASF station and regional facilities were carrying a full load at the end of the month. Progress was made in reducing personnel shortages in general hospitals, but current shortages total 17,300, including 250 medical officers and 3,200 nurses. See pages 33-37.

REJECTIONS AT ARMED FORCES INDUCTION STATIONS Rejection rates are extremely sensitive to administrative policy. The current trend is sharply downward, largely in response to a December directive. Graphic analysis is made of the progress of a set of average selectees through the complex set of examination procedures to the point of final induction or rejection. See pages 38-40.

~~CONFIDENTIAL~~

RESTRICTED



RESTRICTED

~~SECRET~~

## DISEASE AND INJURY

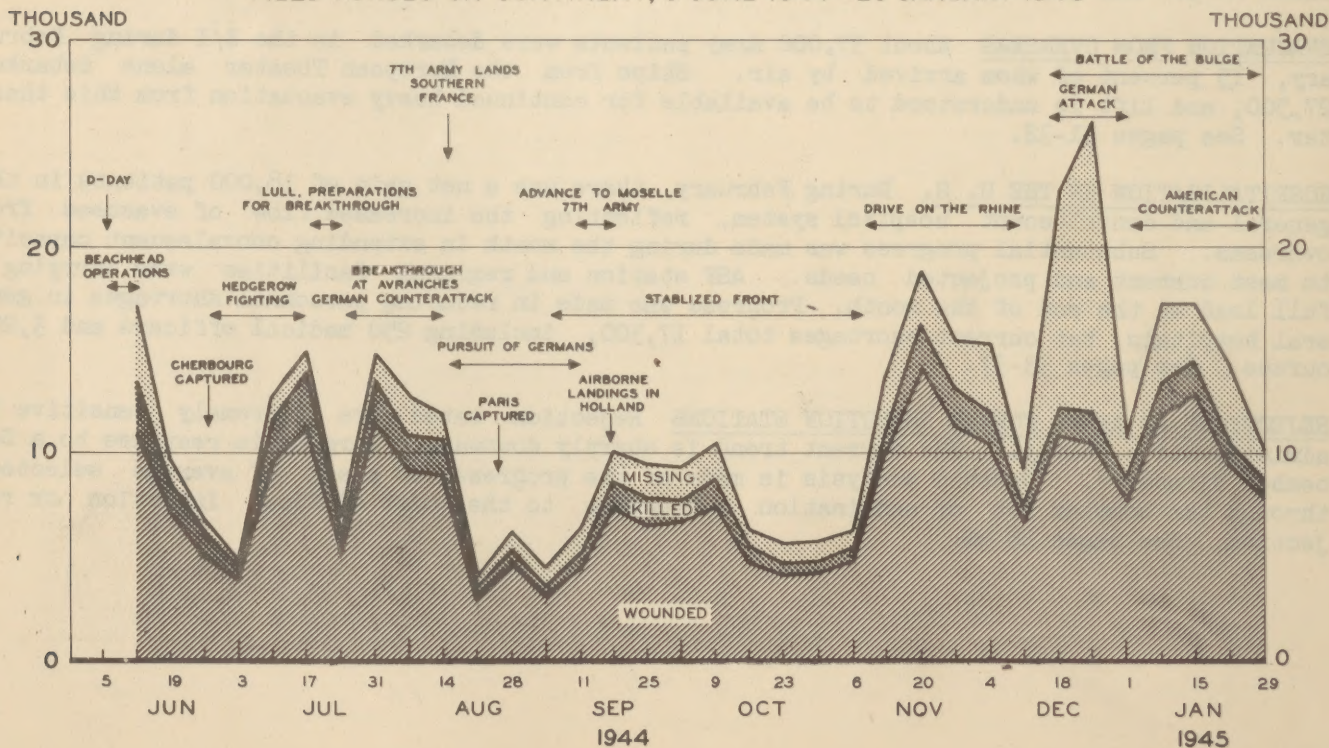
## CASUALTIES IN THE EUROPEAN THEATER

During the first eight months of the campaign against the Nazis in France, the Low Countries, and Germany, American field forces on the Continent sustained casualties at the average rate of .3 men killed and 1.6 men wounded per thousand strength per day. These rates are based upon the longest continuous experience of any large body of American troops in this war, with the exception of the Fifth Army which has been in combat since 9 September 1943. During its first 14 months of combat, the Fifth Army suffered an average rate of .8 men wounded per thousand men per day, only 50 percent of the comparable rate for the field armies in the European Theater. However, the Fifth Army has not been as continuously exposed to combat of such severity, nor has it experienced as sustained and massive counter-attacks as have the First, Third, Seventh, Ninth, and Fifteenth Armies to the north. Rates for certain phases of the experience of the Fifth Army have been as high as any but the most extreme rates for the forces in the European Theater (see HEALTH for September 1944). The charts below and at the bottom of the next page summarize, in both absolute and rate form, the casualty experience of the American armies on the Western Front by weeks. The rates are based on the strength of the U. S. field force on the European Continent, including the Seventh Army from the time it landed in southern France. Against the background of particular events or periods of the campaign, each chart shows the wounded, killed, and missing in action separately. The data for killed include those who died of wounds, and the missing component also includes those confirmed as prisoners or interned. The weekly series of casualties was obtained from a progress report prepared in Headquarters, Communications Zone.

The most notable difference in the two charts is the variation in the average level of the experience between the first and later phases of the campaign. Whereas the number of casualties was, by and large, greater during the last two and one-half months than during the first few months of the operation, the reverse is true of the casualty rates. This distinction is attributable primarily to the fact that the strength of the field forces increased at a faster rate than did the casualties. Also, the proportion of front-line combat troops declined somewhat as the numbers of army and corps service troops on the Continent increased.

With respect to the severity of combat, and its impact upon the forces involved, the experience shown in the two accompanying charts is clearly divisible into three parts. The first two and one-half month period saw the greatest activity. From 6 June until the middle of August the casualties resulted from initial landing operations and beachhead fighting, from the period of hedgerow battle in Normandy, and from the armored break-through at Avranches at the base of the Cotentin Peninsula. The peak during November measures the casualties sustained during the course of the Allied offensive of that month, while those of De-

NUMBER OF BATTLE CASUALTY HOSPITAL ADMISSIONS  
FIELD FORCES ON CONTINENT, 6 JUNE 1944 - 29 JANUARY 1945

~~SECRET~~

RESTRICTED



# DISEASE AND INJURY

RESTRICTED

SECRET

## CASUALTIES IN THE EUROPEAN THEATER (Continued)

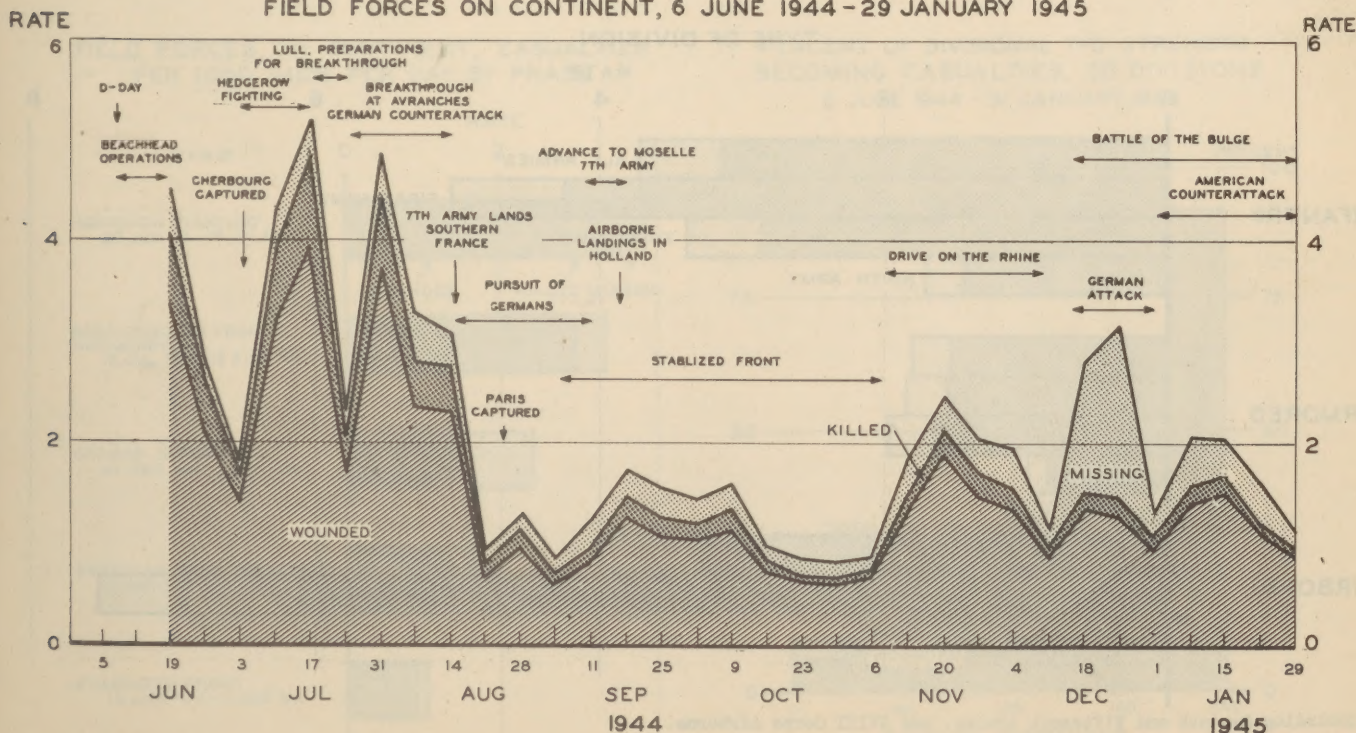
September and January reflect the Battle of the Bulge, first the German break-through and then the American counter-attack. The intermediate period was characterized by fighting on a stabilized front, the movement of the Seventh Army from southern France to a junction with the Third Army, and the Allied airborne landing in Holland.

The left-hand panel of the chart on page 5 presents average rates for the field forces for the several characteristically different periods of tactical activity mentioned above. The rates for the first week are excluded from this panel as well as from the chart on page 2. During this first week men became casualties at the average rate of 14.4 per thousand men per day. The rates for those killed, wounded, and missing were 2.2, 9.1, and 3.1 respectively. These rates are higher than those for any subsequent seven-day period of the campaign. However, the proportion of men missing among all casualties was much smaller during this first week than it was during the German attack in December. For the first seven days ten men were reported missing for every thirty-six reported as either killed or wounded. However, for the week ending 25 December the ratio was ten men to about nine either killed or wounded. The casualty experience at the time of the German counter-attack is exactly similar to that of the subsequent American counter-attack except for the importance of the missing, which is decidedly atypical.

Of the five armies now committed on the Continent, the First Army has sustained the most casualties, its rates of .4 men killed and 2.1 wounded per thousand men per day through 31 January being 52 and 47 percent higher than the rates of the Third Army. The chart on page 4 compares the rates for killed and wounded by echelon and by type of division for all armies except the Fifteenth, which had been in combat for only about one month at the end of January, and the Seventh, for which casualties are available by echelon and division only for the period subsequent to its assignment to the European Theater. The rates are preliminary, being based upon casualty counts which are 90 to 95 percent complete. Strength tabulations available in Washington give only strengths assigned to corps and so do not include assigned army troops attached to corps for operational purposes. It has been estimated that about half of the army troops, excluding troops assigned to divisions, are attached to corps headquarters. All the rates of the First Army are higher than the comparable rates for any of the other armies except in the case of armored divisions, where the experience of both the Third and Ninth Armies is higher. The airborne division rate for the First Army is based on the experience of the 82nd and 101st Airborne Divisions during the initial fighting in Normandy, and upon the casualties of airborne units fighting with the First Army during the Battle of the Bulge. In preparing these rates by echelon the composition of each army was

## BATTLE CASUALTY HOSPITAL ADMISSIONS PER THOUSAND MEN PER DAY

FIELD FORCES ON CONTINENT, 6 JUNE 1944 - 29 JANUARY 1945



SECRET

RESTRICTED



# DISEASE AND INJURY

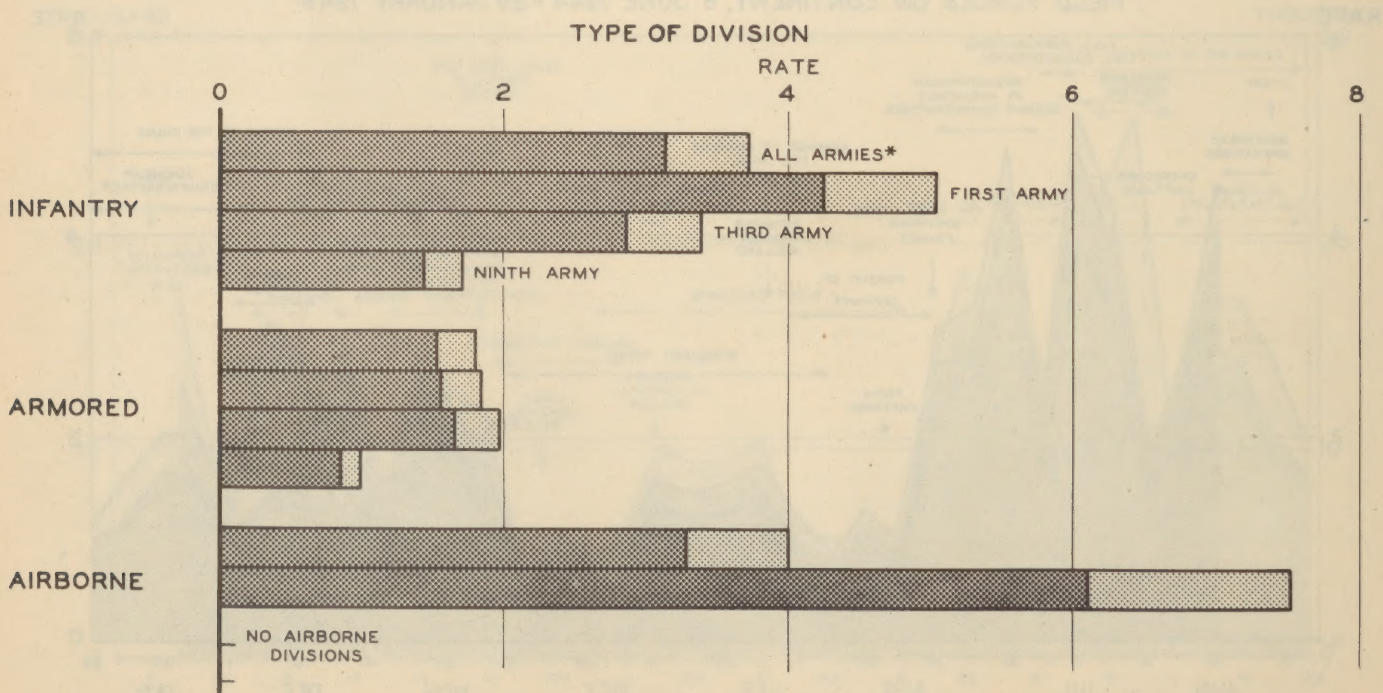
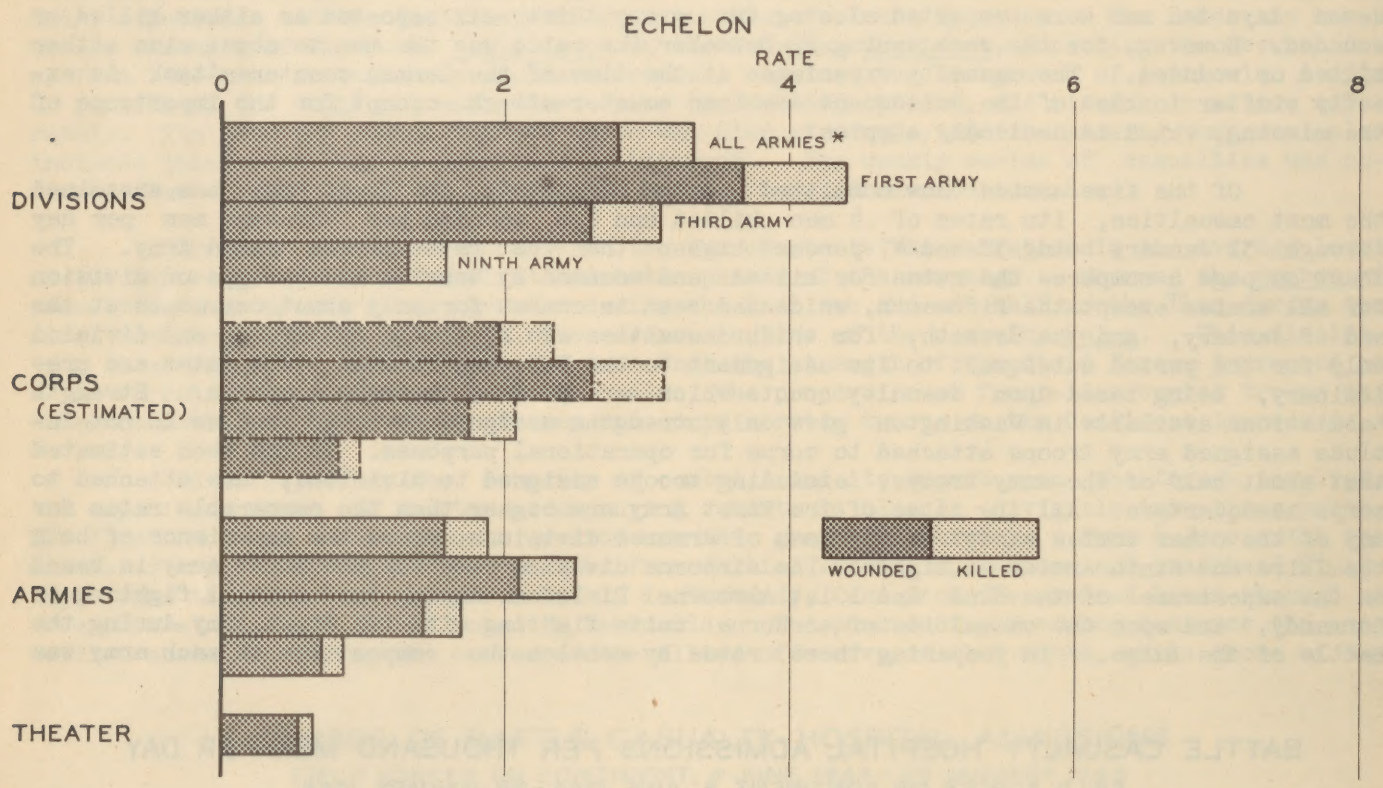
~~SECRET~~

## CASUALTIES IN THE EUROPEAN THEATER (Continued)

taken as that reported to The Adjutant General quarter-monthly on the casualty report from the European Theater. This report gives the army assignment of each division and corps on the last day of the report period once they have sustained any casualties.

On 12 February 1945, the European Theater reported that eight divisions had sustained aggregate casualties through 31 January in excess of their T/O strength, and fourteen more had suffered casualties in excess of 50 percent of T/O strength. The 29th Infantry Division, first committed on 6 June, had reported 19,029 casualties, or 136 percent of its T/O strength. The 82nd and 101st Airborne Divisions, in action for only part of the time, re-

BATTLE CASUALTIES, ADMISSIONS PER THOUSAND MEN PER DAY  
ARMIES ON THE CONTINENT, 6 JUNE 1944-31 JANUARY 1945



\* Including Seventh and Fifteenth Armies, and XVIII Corps Airborne.

~~SECRET~~



DISEASE AND INJURY

SECRET

CASUALTIES IN THE EUROPEAN THEATER (Continued)

ported 61 and 95 percent casualties respectively. The 101st, however, had been surrounded by the Germans at Bastogne during their attack. Only one armored division, the 3rd, reported more than 50 percent of its strength as casualties. The 106th Infantry Division reported 61 percent casualties. Taken in relation to days of combat, the experience of the 106th may well have been the worst, for it did not arrive on the Continent until 4 December. The right hand panel of the chart gives the average percentage of divisional T/O strength reported as battle casualties according to the length of time divisions were on the Continent. The heavily shaded section of each bar represents that portion of the T/O strength reported as wounded. The chart is based upon the experience of the 50 divisions which had been committed to combat and had reported casualties by 31 January 1945.

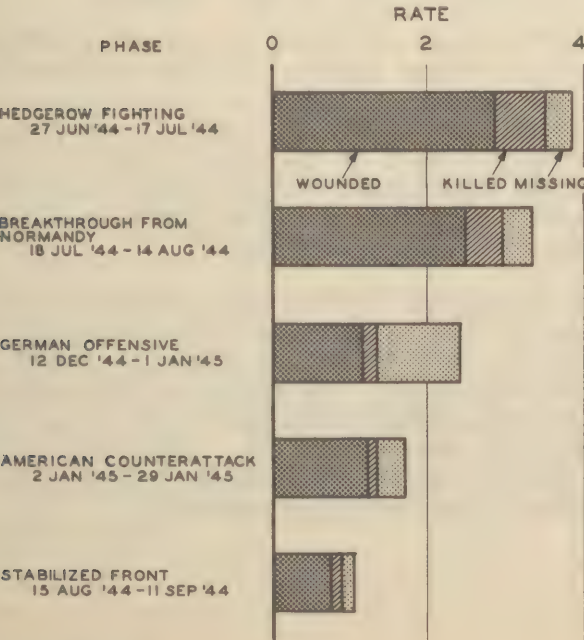
From 6 June 1944 through 22 January 1945, all the Allied armies on the Continent suffered 562,817 battle casualties (killed, wounded, and missing). A British intelligence report gives the following provisional counts of casualties among the various forces. The numbers there may be somewhat less than those actually incurred because of delays in reporting.

MEN KILLED, WOUNDED, AND MISSING, AND NUMBER OF PRISONERS TAKEN BY ALLIED FORCES IN FRANCE, THE LOW COUNTRIES, AND GERMANY

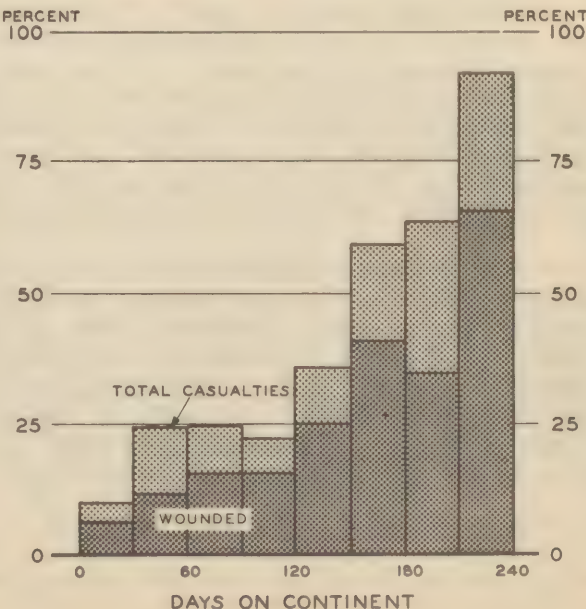
Force	From 6 June to	Allied Casualties				Enemy Captured
		Total	Percent of Total			
			Killed	Wounded	Missing	
TOTAL		562,817	17.5	69.3	13.2	841,487
British	22 Jan	112,559	20.2	66.6	13.2	114,355
Canadian	21 Jan	31,286	23.4	70.0	6.6	66,288
Polish	22 Jan	4,741	21.1	71.4	7.5	11,723
Belgian	22 Jan	271	19.2	67.9	12.9	10
Netherlands	22 Jan	123	16.3	83.7	-	36
Czech	22 Jan	389	24.2	71.9	3.9	1,174
United States <u>a/</u>	19 Jan	376,095	16.2	69.3	14.5	533,424
French <u>b/</u>	15 Jan	37,353	17.8	75.2	7.0	114,477 <u>c/</u>

- a/ Ground forces only
- b/ Under 6th (U.S.) Army Group
- c/ Includes 20,000 enemy PW captured by FFI.

FIELD FORCES ON CONTINENT, CASUALTIES PER 1000 MEN PER DAY, BY PHASE



PERCENT OF DIVISIONAL T/O STRENGTH BECOMING CASUALTIES, 50 DIVISIONS 6 JUNE 1944 - 31 JANUARY 1945



SECRET



**DISEASE AND INJURY**

**CONFIDENTIAL**

COLD INJURY IN FUTURE PACIFIC OPERATIONS

With the movement of Pacific warfare northward into the more variable climate of the temperate zones, it is essential to recognize the very real hazard of extensive cold injuries during any winter operations north of about 32° latitude. Many of the tactical and climatic conditions which produced trench foot and frost bite among troops in the Mediterranean and European Theaters are very likely to be present during any winter operations against the Japanese islands and the northern portions of the Asiatic mainland. The recent European experience of 50,000 cold injury casualties in four months is too important to be neglected in future planning as the Mediterranean experience of 1943-1944 was disregarded. Where combat troops must operate on water-logged ground in temperatures at or just above freezing, it is of the greatest importance that all known preventive measures be promptly employed so as to avoid significant numbers of trench foot cases. Where temperatures are well below freezing, military operations are likely to be complicated by the occurrence of frost bite unless the right equipment is available, and unless a well-conceived program for the prevention of this crippling condition is effectively enforced.

Temperature and precipitation are the determining factors in cold injury. The initial and most serious phase of the trench foot experience in the European Theater occurred in November with mean temperatures of about 40 degrees Fahrenheit. Until 20 December minimum temperatures seldom dropped below freezing, but rainfall was exceptionally heavy and troops operated in a sea of mud. In the majority of cases several days of exposure were necessary before trench foot developed. The importance, then, of reducing periods of exposure as a preventive measure cannot be overemphasized. It was concluded by British observers in World War I and recorded in the chapter devoted to trench foot in the British Official History of the War that "whatever other precautions might be taken, it was essential not to keep the men too long in deep mud or water at low temperature". In contrast to trench foot, frost bite occurs with shorter periods of exposure to very low temperature. The lower the temperature the greater is the incidence and the shorter the time required to develop frost bite. In the European Theater the incidence of frost bite rose significantly in late December and early January coincident with falling temperatures. From 20 December to 1 February mean temperatures on the Western Front were below freezing.

Optimum temperature ranges for the development of trench foot can be anticipated throughout Japan during the winter months, and especially from December through February. The lowlands, where most of the strategic military objectives are located, have mostly flat or gently sloping terrain, much of which is poorly drained. Shallow water, mud flats, and sand bars are frequent along the coasts. Banks of rivers are commonly higher than the lands they drain and cross-country movement off the roads would be hindered by the almost universal wet, ever-muddy rice fields. The rice paddies are interrupted only by an occasional patch of mulberry or other dry crops. Rice fields are virtual swamps during the summer and most of those in the southern areas remain wet and muddy throughout the year, since the ground does not freeze deeply. During winter, when the windward slopes of the mountain ranges forming the backbone of the islands receive their maximum rain and snow conditions are especially unfavorable for ground operations along the northern and western coasts of Japan. Winters on the eastern and southern slopes are characterized by cold but more sunny weather.

The same general type of conditions can be expected in the northern provinces of China. Even as far south as Shanghai winters are cold, while humidity is high and precipitation heavy throughout the year. In the mountainous portions of Japan and the northern Asiatic mainland extreme temperatures are, of course, much more likely and temperatures conducive to both trench foot and frost bite may prevail throughout much of the year. Medical records of the Russo-Japanese war indicate that the Japanese experienced considerable frost bite in Manchuria during the battle of Hei-Kou-Tai in January 1905 when more than 300 men in one division and 200 men in another were admitted to hospitals with this injury.

In the event that large-scale operations in regions of the northern Pacific become necessary during the winter months, a repetition of the unfortunate experience with cold injuries in Europe can be prevented only by recognizing this danger and planning accordingly. The prompt provision of troops with suitable winter equipment, the energetic enforcement of individual foot discipline by line officers, and the development whenever practicable of ways of providing rest periods during which combat troops can warm themselves, dry their footgear and other clothing, and obtain warm food or drinks, represent the necessary measures in any well-conceived plan designed to prevent this disastrous and crippling condition.

**CONFIDENTIAL**



## DISEASE AND INJURY

CONFIDENTIAL

NEUROPSYCHIATRIC PROBLEM IN THE SOUTHWEST PACIFIC

There is evidence that the neuropsychiatric problem is more acute in the Southwest Pacific Area than in any other theater, if the influence of combat activity is left out of account. In the European and Mediterranean Theaters rates higher than those of the Southwest Pacific have been reported, but only in obvious reflection of combat of considerably greater intensity than has been experienced in the Southwest Pacific. In the European area evidence points to a base rate of 20 to 25 admissions per 1,000 men per year to which combat adds a fraction proportionate to the intensity of action. This fraction is roughly estimated at 20 percent of the rate for wounded. In the Pacific and in the Asiatic theaters, on the other hand, the theater rates display no real dependence upon combat activity. This fact is illustrated by the accompanying charts for the Southwest Pacific Area and the Mediterranean Theater. The top two panels give the experience in the usual form of admissions per 1,000 men per year. The bottom pair present these same rates as percentages of their respective averages in order to bring out the difference between the two theaters from the standpoint of the dependence of neuropsychiatric admissions upon tactical activity. Apart from gross incidence there is so little information upon which to base an analysis that one can do no more than set down the obvious possibilities for the radical difference observed. One, of course, is that neuropsychiatric admissions are so inaccurately reported that the relationship is obscured. An unusual type of bias would be required to give precisely this result. It is also possible that neuropsychiatric rates at the theater level do not reflect combat activity until a greater intensity is reached than has been necessary against the Japanese thus far. Other possible explanations are better morale against the Japanese than against the Germans, and a less intense and less prolonged type of combat. Such breakdowns of the theater as are available show that base area sections, first in Australia and later in New Guinea, had the highest rates, the advance areas having generally lower rates. For example, for the month of November the rate is 48 for the New Guinea area and only 25 for the Philippines. The latter rate parallels an admission rate of 226 for wounded, which provides a ratio of one neuropsychiatric admission for nine wounded. Although this is only half as high as has been observed in average European fighting, it is about the same as the ratio for combat divisions on the European Continent in June, and not far from that for the 27th Division on Saipan. These few facts suggest that typical ground combat in the Southwest Pacific may not last long enough or be intense enough to produce neuropsychiatric casualties on the scale found in Europe.

If one accepts the Pacific situation as radically different, there remains the puzzling fact that the average rate for the Southwest Pacific is virtually twice the level for the other two Pacific theaters and twice or more the level for the two European theaters if the influence of combat is disregarded, as may be seen from the second chart below. In other words, the rate for the Southwest Pacific is as high as would be expected if it had engaged heavily in combat throughout the year, yet its combat action has been one-fifth of that of the Mediterranean Theater. A high rate unresponsive to combat activity suggests both poor morale apart from what it takes to endure combat, and either excellent morale in combat or a less dangerous type of combat. In addition to the neuropsychiatric causes common to all theaters, service in the Southwest Pacific presents special hazards to mental stability in the shape of long service in a tropical climate, severe deprivations, monotony of diet, isolation from civilization, the hopeless feeling of being caught in the jungle, abnormal fears of tropical disease, and the like. At the same time, most or all of these conditions are common to the Asiatic theaters, where the reported incidence is quite low.

In contrast to the rotation policy of the U. S. Navy, under which Navy personnel are rotated back to the U. S. at the end of 18 months, in the Southwest Pacific Area the Army has fixed no definite limit on service in the theater. The Navy is by its very nature somewhat more favorably situated than the Army with respect to the feasibility of rotation, especially of personnel afloat. Soldiers in the Southwest Pacific refer to themselves as "lif-ers" because their service appears so long. Specific rotation quotas are, however, set by the War Department and administered by the theater, which has emphasized the rotation of men with the longest service. The Southwest Pacific has 41 percent of the volume of rotation authorized by the War Department for ground troops, and the present volume of rotation is about one percent per month. It is believed that most of the men with three years or more of service in the theater have already been rotated. In addition, any theater commander has discretionary power to furlough an unlimited number of men, if they can be spared and the transportation is available to him. However, the Army is losing much of the morale-sustaining value of even the present volume of rotation from the theater by failing to fix a definite time limit on service there. Even if this limit were double the Navy limit of 18 months it would offer a specific goal not now in view and encourage men to endure their privations in anticipation of rotation. It would go far to alleviate the hopeless, resentful feelings of Army personnel about what they consider discrimination between the two services, but would have to be fixed well within the limits of practicality in order that any promises made would not be broken.

CONFIDENTIAL



**DISEASE AND INJURY**

**CONFIDENTIAL**

NEUROPSYCHIATRIC PROBLEM IN THE SOUTHWEST PACIFIC (Continued)

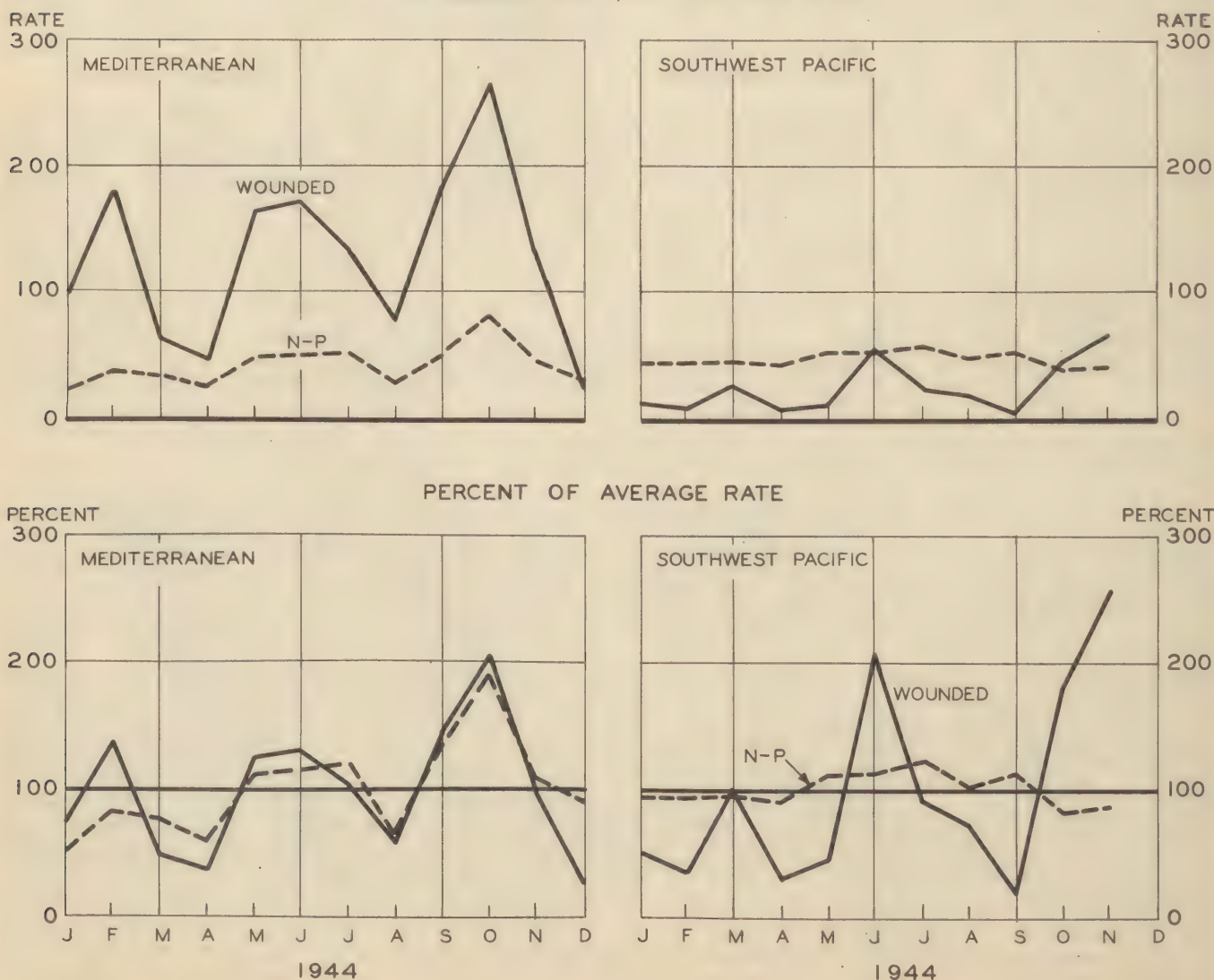
According to reports received by The Surgeon General the theater has achieved outstanding success in the treatment of minor psychiatric disorders. Special station hospitals were designated for neuropsychiatric patients and returned to duty an average of 85 percent of their patients. One follow-up study showed that 82 percent of a large sample returned to duty were still on duty after an average of 10.5 months, and another study of a smaller group gave similar results. It is unfortunate that these special neuropsychiatric hospitals were sacrificed by the reorganization plan undertaken to expand the capacity of fixed hospitals in the theater, especially since clinical opinion in the theater is that a far smaller percentage of minor neuropsychiatric cases is now being returned to duty. The general attitude of the average medical officer and disposition board in the theater is much less optimistic with respect to possible return to duty than were the staffs of the special neuropsychiatric hospitals, so that boarding for evacuation is now more likely. One implication of such a change would be a higher evacuation rate for neuropsychiatric causes with the deleterious effect upon morale which it would produce among those who saw men with minor complaints being sent back to the U. S. Reconditioning programs in the theater are well developed on the physical side but place little or no emphasis upon rebuilding morale and wholesome mental attitudes. The occupational therapy program has been hampered by a dearth of trained personnel, and by inadequacies of equipment and supplies.

As in other theaters as well as in the U. S., individual psychotherapy is possible for psychoneurotic patients only in selected cases, but group psychotherapy has not yet been fully developed in the theater. Failure to accomplish distribution of WD Technical Bulletins

**WOUNDED AND NEUROPSYCHIATRIC ADMISSIONS**

MEDITERRANEAN AND SOUTHWEST PACIFIC, 1944

ADMISSIONS PER 1,000 MEN PER YEAR



**CONFIDENTIAL**



# DISEASE AND INJURY

CONFIDENTIAL

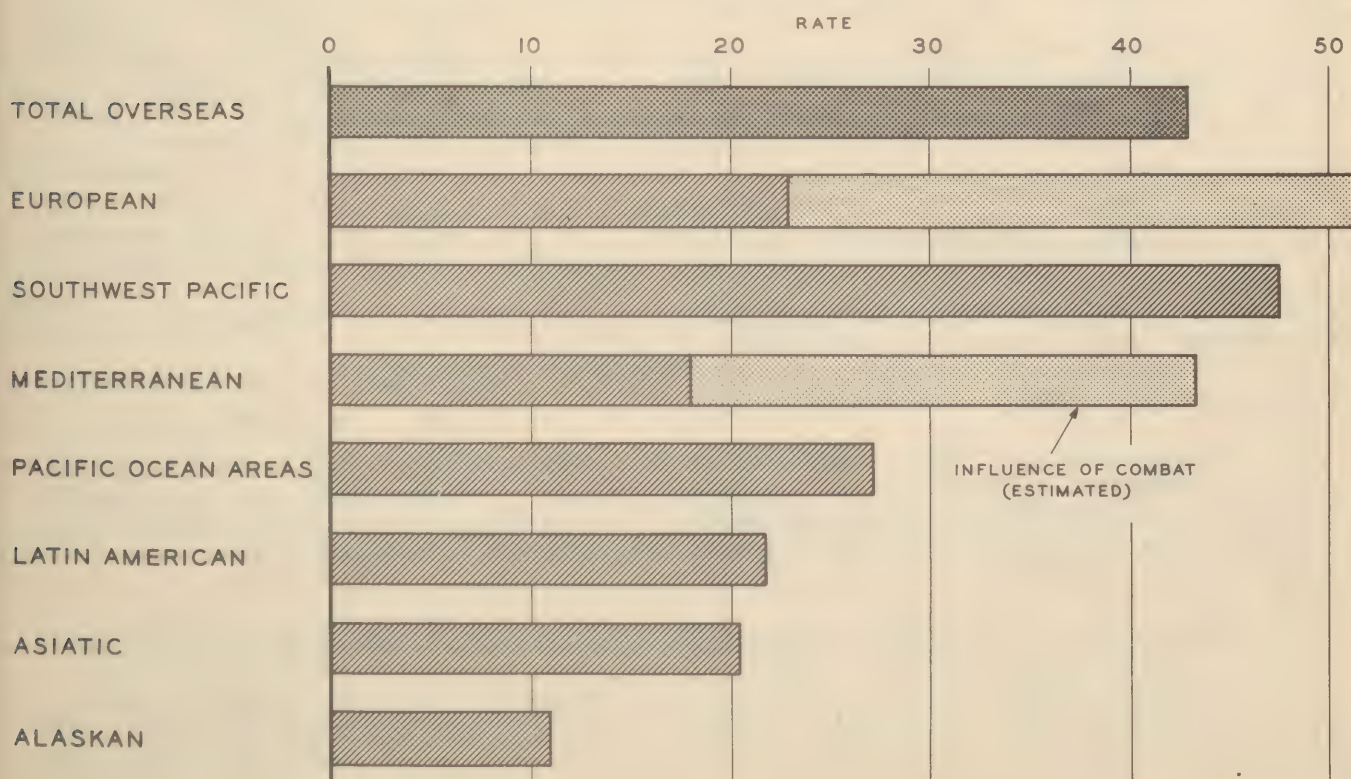
## NEUROPSYCHIATRIC PROBLEM IN THE SOUTHWEST PACIFIC (Continued)

Med dealing with this and related subjects has unnecessarily deprived medical personnel of the specific guidance needed in improving psychiatric treatment. The definitive treatment of psychotic patients has been hampered by inadequacies of special equipment needed for this purpose. The evacuation of psychotic patients has been a difficult and trying problem because of insufficient evacuation capacity of the single-room type needed for acutely disturbed patients. Air evacuation of such patients is now being carried out and has materially reduced the back-log of boarded psychotic patients.

The Southwest Pacific Area has an excellent neuropsychiatric consultant, but there has been a shortage of well-qualified neuropsychiatrists for other positions. Recently ten additional specialists were ordered to the theater to alléviat this situation. Training programs have been developed for ward officers and other personnel on neuropsychiatric services in order to improve the quality of psychiatric and neurological care. Although both prevention and early treatment must be organized well forward if they are to be highly successful among combat personnel, the position of the neuropsychiatric consultant in the SOS restricts his contact with ground and air personnel in the forward areas.

With but one exception combat divisions have neuropsychiatrists assigned. Divisions and forward hospitals are credited with outstanding work during the Leyte campaign, returning most neuropsychiatric patients to duty without evacuation from the divisional area. One division, the 38th Infantry Division, has developed an unusually effective preventive program. Integrated with the information and education program, it provides classes in various subjects and encourages men to take courses in the Armed Forces Institute. Hobbies are effectively encouraged, and discussions are held on subjects of wide interest. Effective staff liaison with G-1 facilitates the proper reassignment of mild neuropsychiatric cases unfit for combat but able to perform some other task satisfactorily. The G-1 receives morale reports from unit surgeons and chaplains as well as from the division neuropsychiatrist, and these reports are consolidated for the division chief of staff who in turn takes up his morale problems with each unit commander. In keeping with the principle that leadership is a prime determinant of morale, weak company commanders are relieved from command and either reclassified or reassigned. All these measures are productive of high morale and a favorable neuropsychiatric rate in this division. Programs of this sort for base areas, more attention to the proper assignment of men, and a more liberal rotation policy would go far to improve working morale and lower the high neuropsychiatric admission rate of the theater.

NEUROPSYCHIATRIC ADMISSIONS PER THOUSAND MEN PER YEAR  
OVERSEAS THEATERS 1944



CONFIDENTIAL



~~RESTRICTED~~  
~~CONFIDENTIAL~~

## DISEASE AND INJURY

### NEUROPSYCHIATRIC PROBLEM IN ITALY

During 1944 the II Corps, Fifth Army, sustained roughly 40 percent of all the casualties in the Mediterranean Theater and almost 50 percent of the Fifth Army casualties for the year. For this reason special significance attaches to the following excerpts from its annual medical report for 1944.

"During the month of October, . . . admissions . . . were the highest in the history of II Corps in World War II. Of all the diseases, exhaustion [psychiatric disorders] was second to respiratory in incidence with a rate of 205 per 1,000 per annum. During this period an investigation into reasons advanced to psychiatrists for military delinquencies and factors involved in neuropsychiatric cases was made. Several conferences were held with psychiatrists attached to Fifth Army and a number of reports were considered. It appears to be the considered opinion of these specialists that in general 'exhaustion' cases and military offenses are due in a very large part to an extremely poor esprit de corps and a basic lack of orientation on why we are fighting the Germans and why we are fighting at all at the present time in Italy."

\* \* \*

#### "Mental Attitudes

"In considering why a man will risk dishonor, imprisonment, and disgrace and commit an offense under the Articles of War, and why many more break down under stress of warfare and become exhaustion cases or seek evacuation through medical channels for functional ills (not malingerers), one must consider how a man explains these things to himself in his own mind. Except in incorrigibles and habitual offenders, a man usually has to 'see himself' in his plan for escaping an unbearable (to him) situation. He does this by what to him is logical reasoning.

"Psychiatrists agree that at present there is a low morale among our troops for a number of reasons. They also have been amazed at the lack of understanding or even of interest in 'Why We Fight'. They [the men] have not been sold on it and also appear to have a very skeptical attitude toward the present Italian Campaign, and the need for it. They say that they have no wish to be wounded or die in it. Some of the reasoning used by these men is given below.

"1. The war in Italy, particularly since the fall of Rome, has been an unnecessary waste of men and materiel.

"2. The war in Italy at present is not worth the cost since the war with Germany will not be won here but in France and Germany. So why risk life and limb here.

"3. They are influenced by the recent premature publication in newspapers about plans for the celebration of V-Day in the States, plans for partial demobilization, plans for the Army of Occupation. They argue that if the end is so close, why die now on an obscure battle field in Italy.

"4. They are influenced by the sudden loss of publicity and apparent interest in the public press on what happens in Italy. They do not think people realize there is still hard fighting here and in difficult country.

"5. They feel that Fifth Army forces have had to do more than their share of hard fighting.

"6. They feel that if the government has applied such a low priority to this theater for supplies, replacements, materiel, ammunition, and mail, that even the government considers the armies here of no great importance. If it isn't important enough for a priority, why be killed here or maimed here, is the way they reason.

"7. One man, asked why he was fighting, replied: 'Because I was drafted. I have nothing against the Germans. They are forced to fight too.'

"8. Some seem to feel that Germany was not an 'Aggressor Nation' as far as we are concerned, since they did not directly attack us.

"There is no definite opinion as to the attitudes of replacements in general. It was noted, however, that during the period 16 September - 30 September the 91st Infantry Division evacuated 412 exhaustion cases of which 70 percent had been recent replacements. The two high points, so far as length of service is concerned in neuropsychiatric cases, are the 'new men' and the men who have seen long service.

"Age groups indicate the 18 - 20 year olds and the over 35 year olds are least stable.

"These men appear to have confidence in their company and platoon leaders particularly if the officer lasts long enough to know his men. However, many times company and platoon leaders change so fast that the men hardly know who they are. It has been noted that when a popular battalion, company, or platoon commander has been killed or wounded there will immediately follow a small wave of defections in that unit."

~~CONFIDENTIAL~~

RESTRICTED



DISEASE AND INJURY

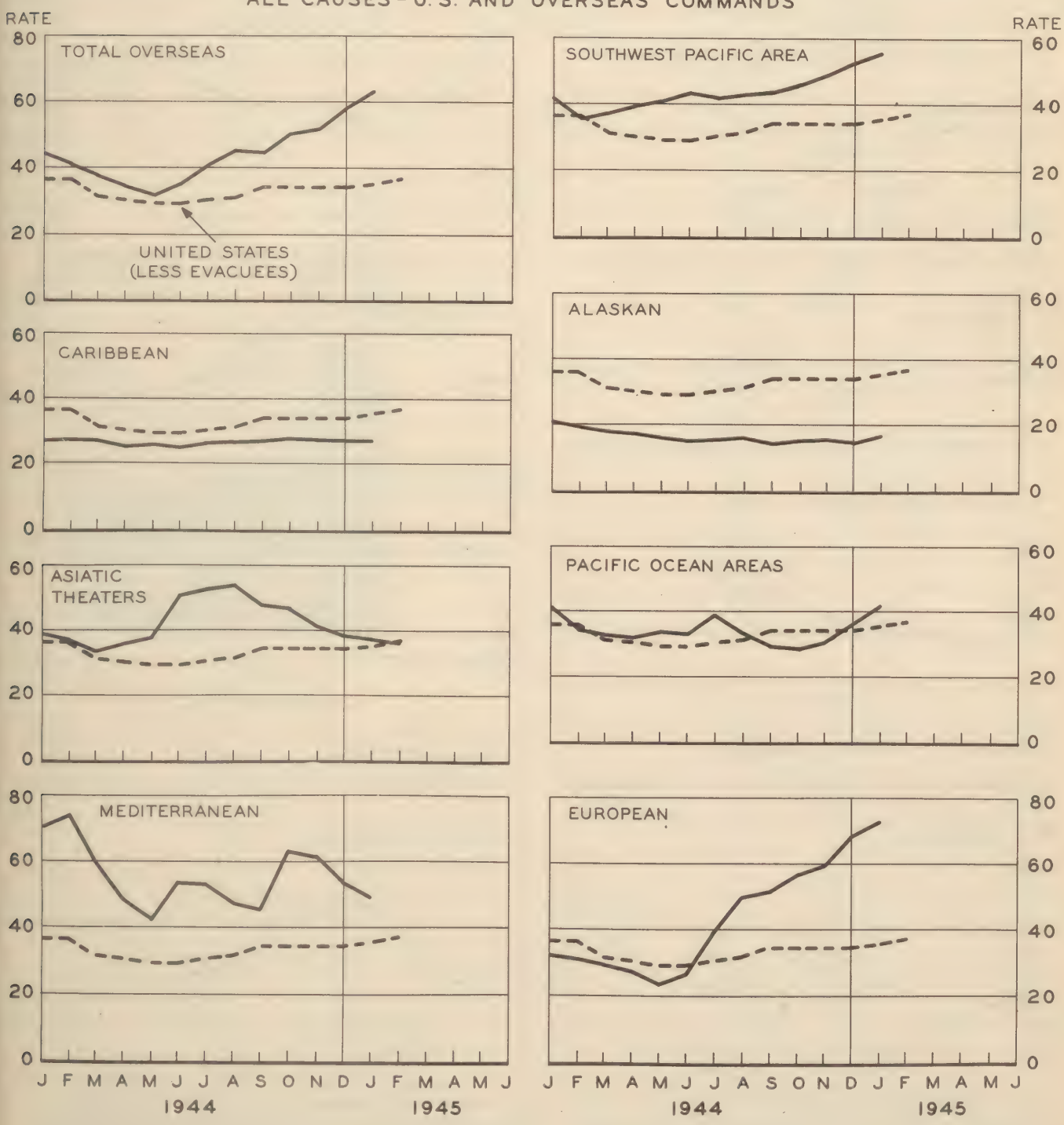
CONFIDENTIAL

NONEFFECTIVE RATES

During January 1945, the total noneffective rate increased further in all except the Asiatic and the Mediterranean Theaters, according to preliminary radio reports to The Surgeon General. The decrease in the rate for the Mediterranean Theater arises from the declining number of wounded remaining in hospital, for the noneffective rate for disease has increased since November 1944.

The charts on the following page subdivide the total noneffective rates shown below into their disease, injury, and wounded components. The series presented for the European Theater are based upon corrected reports and replace the estimates used since June 1944.

AVERAGE NUMBER OF NONEFFECTIVES PER THOUSAND STRENGTH  
ALL CAUSES - U.S. AND OVERSEAS COMMANDS



CONFIDENTIAL



RESTRICTED

## DISEASE AND INJURY

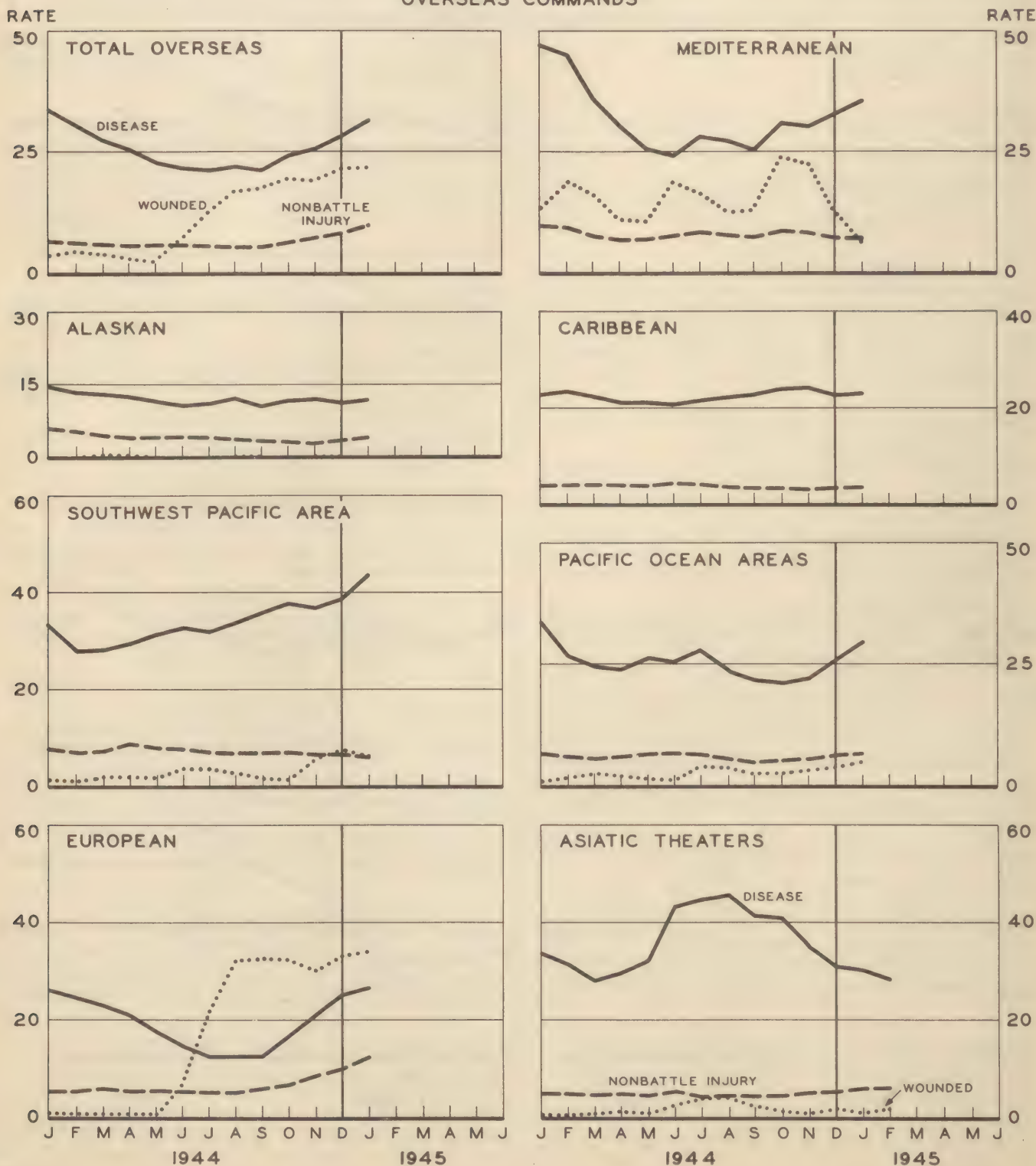
**CONFIDENTIAL**

### NONEFFECTIVE RATES (Continued)

During December the noneffective rate for wounded in the Southwest Pacific was greater than that for nonbattle injury for the first time since January 1943, when the effect of the Buna-Gona campaign resulted in a rate of 12 per thousand strength. In the Mediterranean Theater the January nonbattle injury rate exceeded that for wounded for the first time since October 1943. The battle component for the Southwest Pacific has increased as a result of casualties sustained in the Philippines, while the comparative stalemate in Italy has of course lowered casualty rates in the Mediterranean Theater. It is not certain that the reporting from the Southwest Pacific is complete with respect to the 24th Corps comprising Pacific Ocean Areas units attached to the Southwest Pacific for operational purposes.

### AVERAGE NUMBER OF NONEFFECTIVES PER THOUSAND STRENGTH

#### OVERSEAS COMMANDS



**CONFIDENTIAL**

RESTRICTED



# DISEASE AND INJURY

CONFIDENTIAL

## NONEFFECTIVE RATES, U. S. AND OVERSEAS

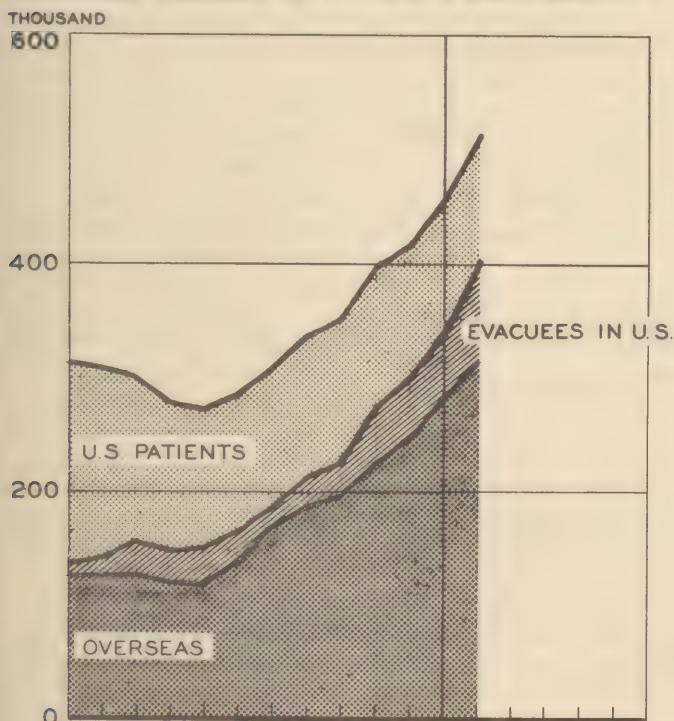
The corrected U. S. noneffective rate did not increase substantially during February. The rate has been corrected by disregarding overseas patients in U. S. hospitals. The overseas component, however, increased by about 25 percent, bringing the total U. S. noneffective rate up to the unprecedented level of 77 per thousand men. A further increase in the U. S. rate may be anticipated in view of the current volume of evacuation to the Z/I.

The total noneffective rate overseas increased by about 10 percent during January. The disease, injury, and battle casualty components all rose considerably. The overseas data charted below have been revised on the basis of better information from the European Theater and are now comparatively complete through January 1945.

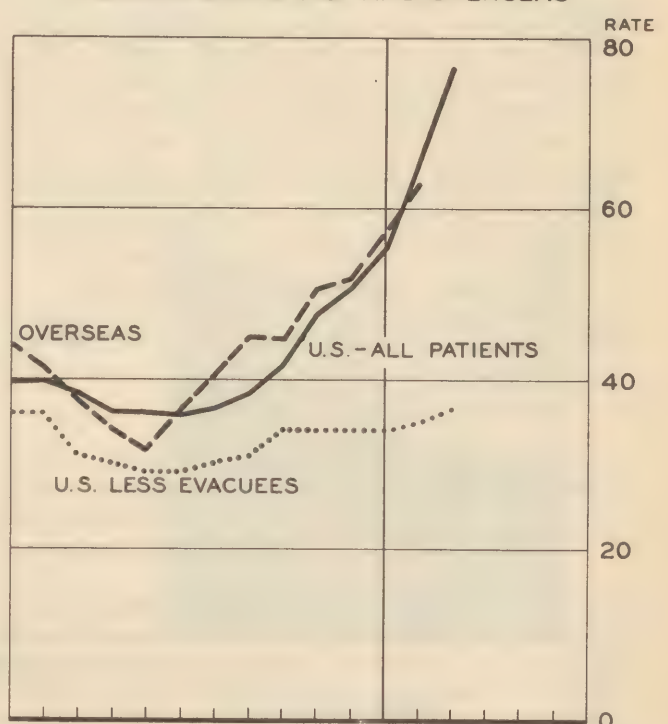
## AVERAGE NUMBER OF NONEFFECTIVES PER THOUSAND STRENGTH

### ALL CAUSES

#### AVERAGE NUMBER OF PATIENTS EACH MONTH

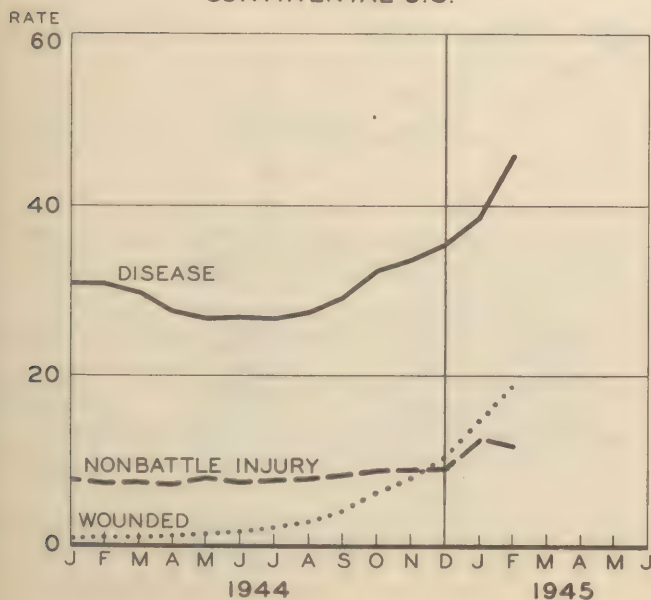


#### CONTINENTAL U.S. AND OVERSEAS

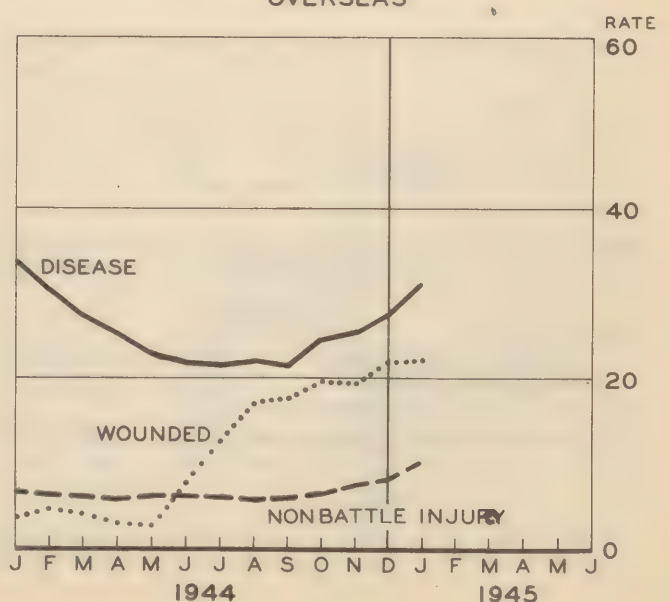


### MAJOR CAUSES

#### CONTINENTAL U.S.



#### OVERSEAS



CONFIDENTIAL



DISEASE AND INJURY

CONFIDENTIAL

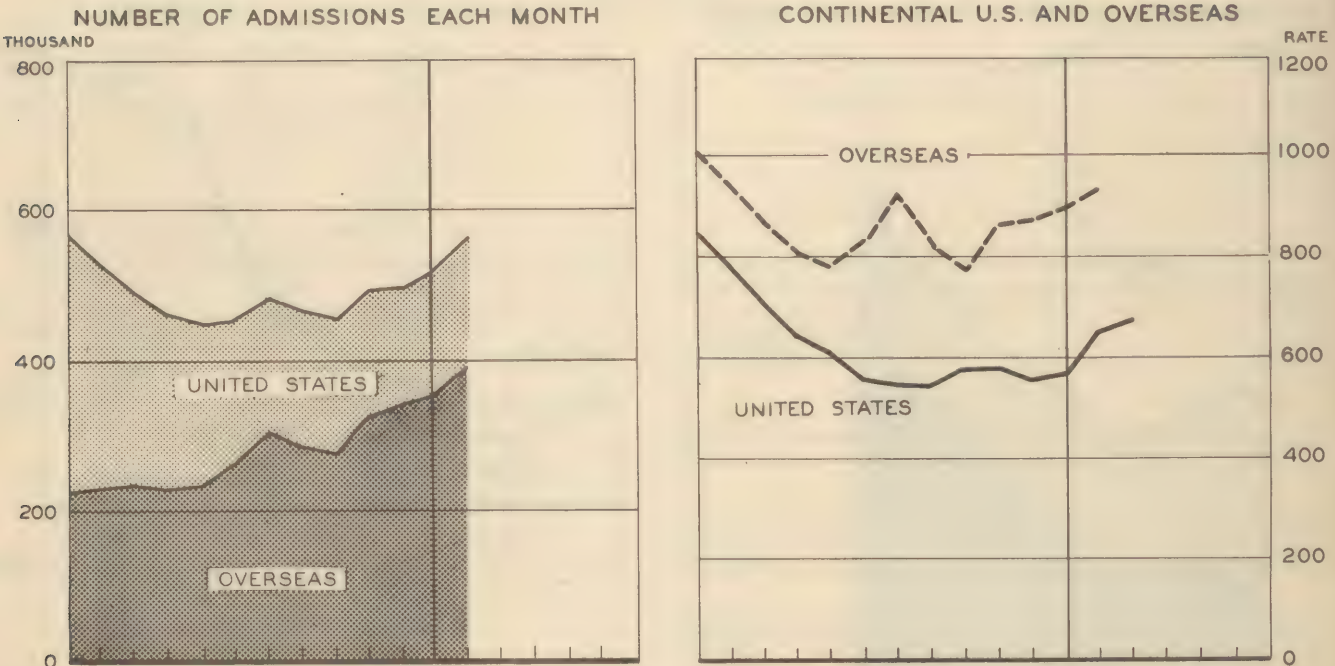
DISEASE, INJURY, AND BATTLE CASUALTY ADMISSIONS

With the receipt of substantially complete reports from the European Theater through January 1945 the total overseas admission rates since June 1944 have been placed on a more firm basis. Disease admissions to hospital and quarters both overseas and in the United States have continued to rise, although they are still quite favorable in comparison with the experience of a year ago. The admission rates for all causes in the United States are considerably below those for the Army overseas, chiefly because of battle casualties and the higher accident rate overseas.

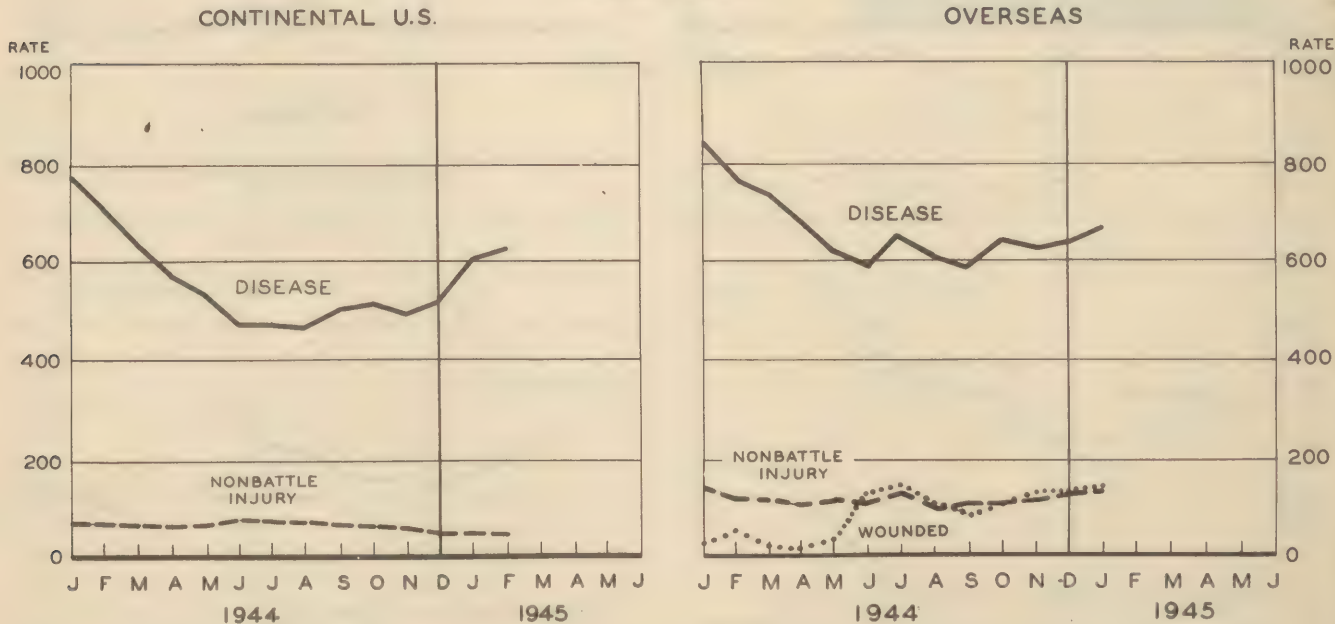
The nonbattle injury admission rate continued to rise during January 1945, approaching the level of the battle casualties. This is attributable in large part to the incidence of cold injuries in the European Theater.

DISEASE, INJURY, AND BATTLE CASUALTY, ADMISSIONS PER THOUSAND MEN PER YEAR

ALL CAUSES



MAJOR CAUSES



CONFIDENTIAL



# DISEASE AND INJURY

## HEALTH OF PRISONERS OF WAR IN THE UNITED STATES

During 1944, the strength of prisoners of war in the continental United States more than doubled. In terms of their actual admission rates for disease and injury and in relation to the morbidity experience of U. S. Army troops in this country, the health conditions of the prisoners of war was very satisfactory. The first chart below shows admission rates for all causes for Italian (including Italian Service Units), German, and Japanese prisoners of war separately. Injury rates for German prisoners were about twice those for Italian prisoners, while rates for respiratory disease and malaria were higher for the Italians. For the last seven months of the year, when separate reports were received, Italian Service Units had admission rates for injury and disease considerably in excess of those for Italian prisoners.

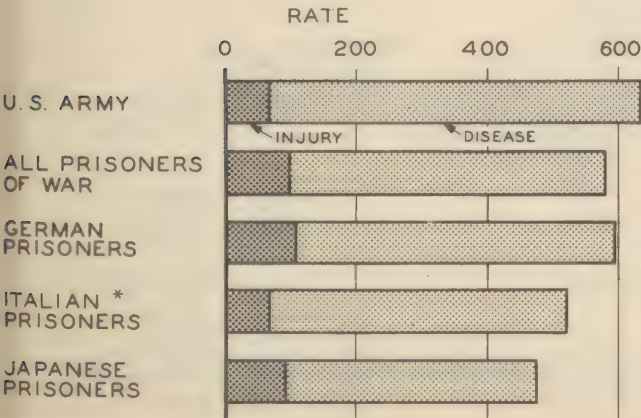
The lower bar-charts below compare the admission rates for injury and for the leading disease diagnoses among prisoners of war and among Army personnel in the United States. These panels are drawn to different scales to permit comparison. It is noticeable that the PW rate is more favorable for most diseases. The rate of 480 for all diseases contrasts with 563 for U. S. Army troops, reflecting the lower incidence of respiratory disease among prisoners of war during the first quarter of the year. After May, the rates of U. S. Army personnel tended to be slightly lower than those of the prisoners. A rate of 77 was reported for common respiratory diseases among prisoners, only about half that reported for U. S. troops, while the pneumonia rate was about 80 percent below that of Army troops in the U. S. The more favorable respiratory rates are largely attributable to the fact that prisoner of war camps are located mainly in the southern portion of the country, where admissions for respiratory diseases are normally low. Rates of about .2 per thousand men per year for measles, mumps, and scarlet fever were experienced by prisoners of war in comparison with rates ten to twenty times higher for U. S. troops. The incidence of meningitis and rheumatic fever among Army troops was also well above the level of that reported for prisoners of war, while rates for diarrhea and dysentery were very similar. The malaria admission rate of 44 per thousand men per year, representing predominantly cases acquired outside of this country, comprises almost ten percent of the total disease rate for prisoner personnel. Diphtheria, infectious hepatitis, and tuberculosis admission rates were also higher than those of U. S. Army personnel.

Injury admissions for prisoners in the United States were almost 50 percent higher than those for U. S. troops. Injuries sustained as a result of work details involving greater exposure to minor injury, and a considerable number of injuries received during athletic activities, are partly responsible for the higher rate.

The noneffective rates for U. S. troops (less evacuees) and for prisoners of war were very similar towards the end of the year. Since the admission rates were also closely parallel for the last six months of 1944, it appears that the average duration of sickness among prisoners of war has not differed materially from that of U. S. Army personnel. Death rates for prisoners were less than a third of the corresponding rates for U. S. troops. However, about three-quarters of the deaths among U. S. Army troops were the result of aviation and automobile accidents, hazards to which prisoners are obviously not exposed.

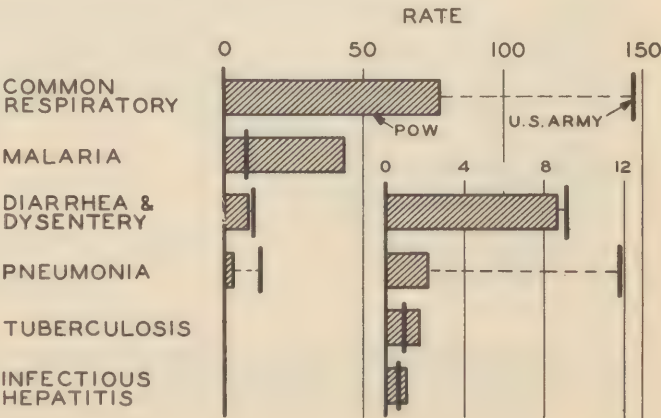
### PRISONERS OF WAR IN THE U.S. ADMISSIONS PER THOUSAND MEN PER YEAR, 1944

#### ALL CAUSES



\* Including Italian Service Units

#### SELECTED DIAGNOSES





## DISEASE AND INJURY

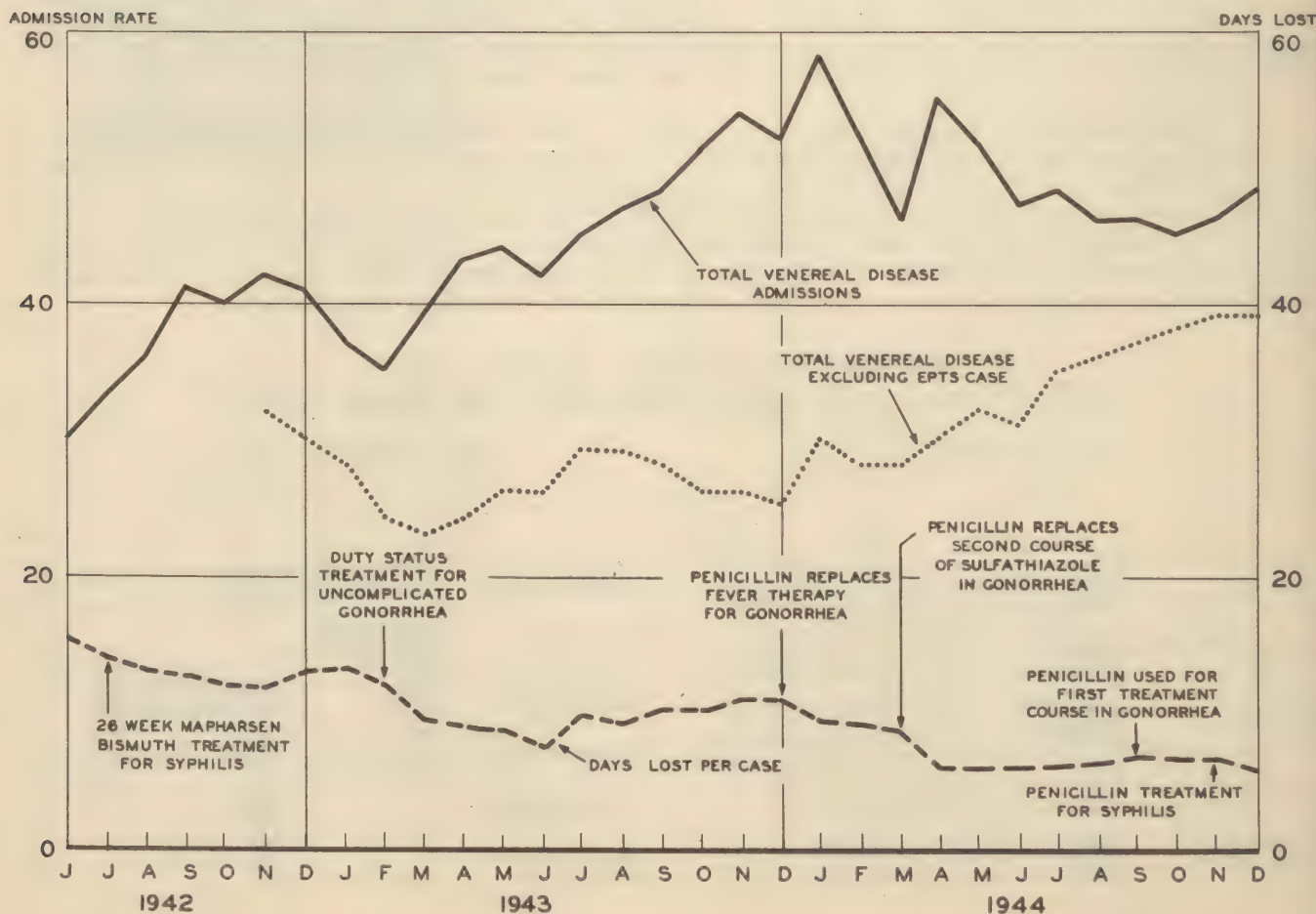
### IMPROVEMENTS IN TREATMENT OF VENEREAL DISEASE

Despite the generally upward trend in the uncorrected venereal disease admission rate among troops in the continental United States since the middle of 1943 the noneffective rate for this cause has been gradually diminishing. The great scientific discoveries in the field of chemotherapy, together with outstanding work in their application to the treatment of venereal infection, can be credited with the spectacular reduction in days lost by patients with these diseases, and with a great reduction in the complications from gonorrhea. The new methods of treatment have the additional advantage of being virtually free of toxic reaction. In 1939 the average length of hospitalization for a patient with venereal disease was 42 days but by 1944 this figure had declined to 6.5. Even in the face of a rising admission rate, a considerable saving in manpower has been accomplished, as will be observed in the chart on the next page. The bottom line shows the actual noneffective rates for venereal disease since June 1942, the earliest date for which rates by month are readily available. The top line demonstrates what the same curve would have been, on the basis of the observed admission rates, if the average of 15 days lost per case in June 1942 had continued to date.

Prior to the sulfonamide era, treatment of gonococcal infections consisted mainly of the application of local therapy - instillations, irrigations, massage, and instrumentation. Disabling complications were frequent; in 1937 they occurred in 28 percent of all cases in the Army. The introduction of sulfonamides revolutionized medical thought with regard to management of gonorrheal infection. Coincident with the introduction of systemic chemotherapy and the gradual abandonment of local therapy, a tremendous decrease has occurred not only in the duration of infection but also in the number of complications. Sulfanilamide was the first of the sulfonamides employed. However, it was soon superseded by sulfapyridine, and later by the more effective and less toxic sulfathiazole. Treatment was routinized as far as possible, the recommended course being one gram of sulfathiazole four times a day for five days.

Second courses of therapy were recommended in cases in which evidence of persist-

### VENEREAL DISEASE ADMISSIONS PER THOUSAND MEN PER YEAR AND DAYS LOST PER CASE, CONTINENTAL UNITED STATES





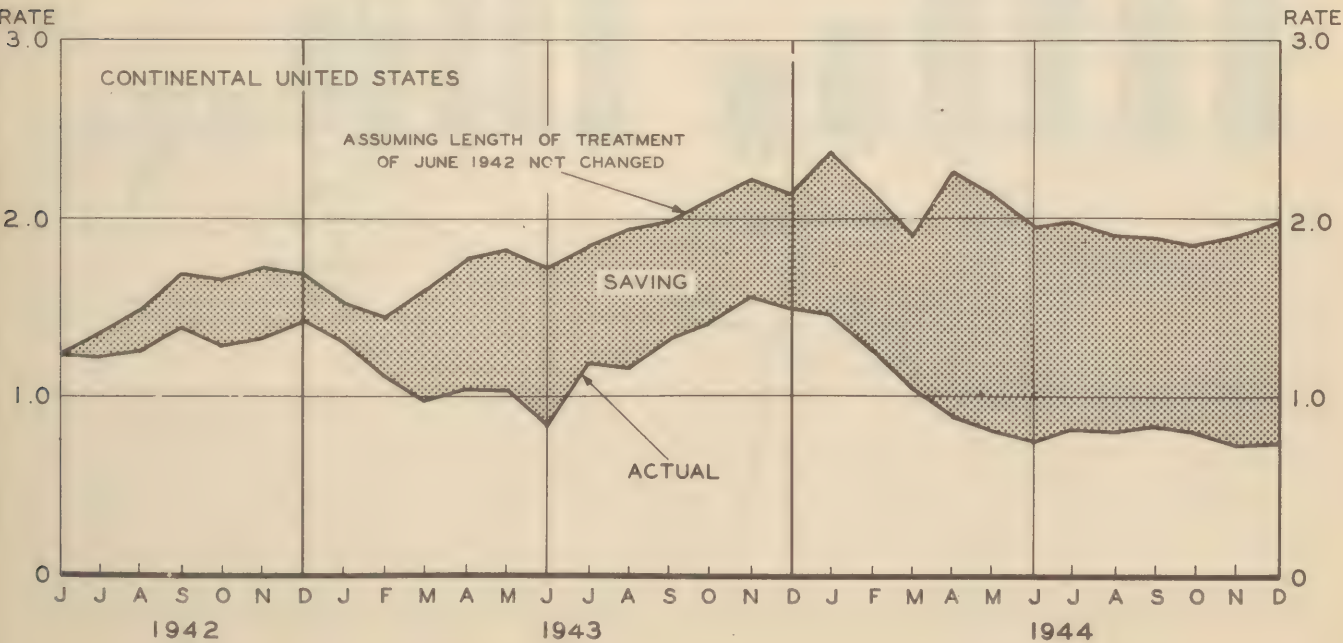
DISEASE AND INJURY

IMPROVEMENTS IN TREATMENT OF VENEREAL DISEASE (Continued)

ence or recurrence of the disease existed. Sulfonamide-resistant cases were transferred to general hospitals and received fever therapy. It is estimated that this group, constituting from 10 to 20 percent of all cases, contributed fully 50 percent of the total days lost. The rise in the curve of days lost during the last half of 1943, as shown in the chart on the preceding page, is the result of the necessity for using fever therapy for an accumulated back-log of sulfonamide-resistant cases. More than three-fourths of all patients with uncomplicated gonorrhea responded to one or two courses of a sulfonamide drug, the incidence of complications was low, and toxic reactions from sulfathiazole were exceedingly uncommon. Furthermore, when patients were treated on an ambulatory basis, the end results in terms of cure, complications, and drug reactions were found to be nearly as favorable as when treatment was given in a hospital. Treatment of gonorrhea on a duty status was authorized for the Army as a whole in February 1943 and effected an additional saving in days lost. In early 1943, the effectiveness of penicillin in the treatment of sulfonamide-resistant gonorrhea was recognized and, as soon as the limited supply allowed, the drug replaced fever therapy in sulfonamide-resistant cases. Penicillin was also made available to certain troops overseas. By March 1944, penicillin had been substituted for sulfathiazole in all cases requiring a second course, but it was not until September 1944 that the supply situation permitted penicillin to be declared the drug of choice throughout the United States Army and the use of sulfonamides to be limited to cases not responding to adequate penicillin therapy. Preliminary data indicate that one course of penicillin with a dosage of 100,000 units may be expected to effect cures in more than 95 percent of cases. Complications of gonorrhea respond to penicillin well although the more serious forms may require prolonged treatment with higher dosage. Drug reactions have been minor and infrequent. There is every indication that penicillin therapy may soon reduce gonorrhea to the status of an inconsequential infection.

Although the length of hospitalization for syphilis has been reduced only very slightly by the progress in therapeutic methods, substantial savings have been achieved in length of treatment. Military requirements are best served by a system of treatment covering the shortest possible time consistent with safety to the patient and therapeutic efficiency. Although symptoms caused by early syphilis can be quickly eliminated, treatment itself has often resulted in morbidity, while continuation of treatment over long periods has presented numerous administrative difficulties. In July 1942, on the basis of experience with arsenoxide (mapharsen) and to meet the exigencies of the Army patient and the Army situation, the Army adopted, in lieu of the 52-week program of neoarsphenamine-bismuth, a 26-week plan of mapharsen-bismuth therapy, thus compressing to a period of six months the formerly routine 12-month or more procedure. From the standpoint of toxic reactions and practicability of administration, the newer scheme appeared to be definitely superior to the old. Since the total amount of arsenical administered was practically the same, it is believed that the end

VENEREAL DISEASE NONEFFECTIVES PER THOUSAND MEN  
 SAVING ACHIEVED BY REDUCTION IN LENGTH OF TREATMENT





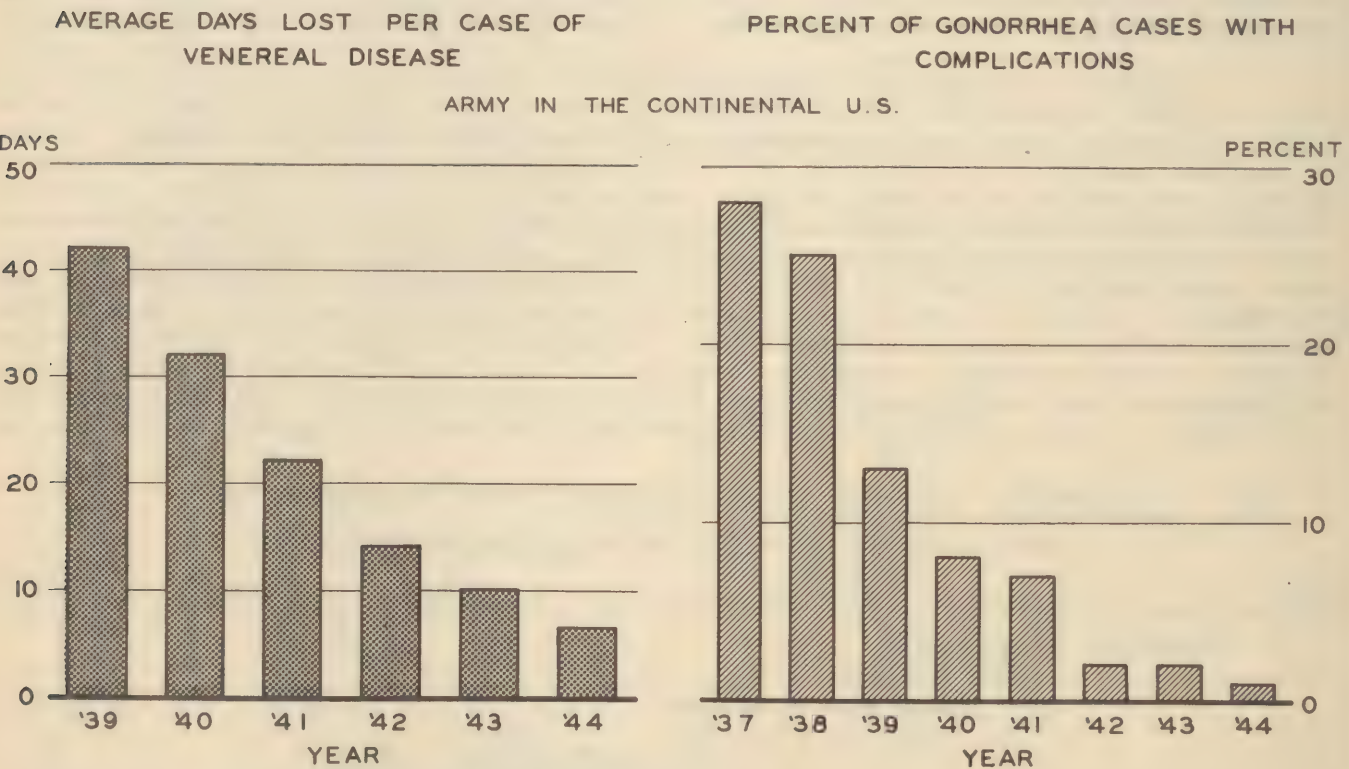
# DISEASE AND INJURY

## IMPROVEMENTS IN TREATMENT OF VENEREAL DISEASE (Continued)

results do not differ significantly under the two schemes of treatment and that cures are effected in not less than 85 percent of early cases. Persons with primary or secondary syphilis are hospitalized for a week or ten days until rendered non-infectious after which treatment is carried on by unit medical officers.

Intensive methods of arsenotherapy, such as the five-day intravenous drip, would appear to offer many advantages to the armed services in terms of length of treatment. The evidence indicates that results achieved by these methods in early syphilis are equal to those of the more time-consuming techniques but the enhanced risk of serious reaction or death has not justified adoption by the Army of any intensive method using arsenical drugs yet developed. In all large series thus far reported, death has occurred in one of approximately 250 patients treated as compared with a mortality rate from treatment alone of about one in 5,000 when arsenoxide is given by routine methods.

On the basis of experiments demonstrating the effectiveness of penicillin in the treatment of human syphilis, a War Department Technical Medical Bulletin introduced the penicillin treatment of syphilis on an Army-wide basis in October 1944, although this method of treatment had been authorized for overseas troops at an earlier date. With a total dosage of 2,400,000 units given in 60 consecutive intra-muscular injections at three-hour intervals day and night, the total treatment time is thus reduced to seven and one-half days. This method is at least as effective as any treatment plan heretofore employed, and much less dangerous.





# DISEASE AND INJURY

## DENTAL INFECTION AND INJURY

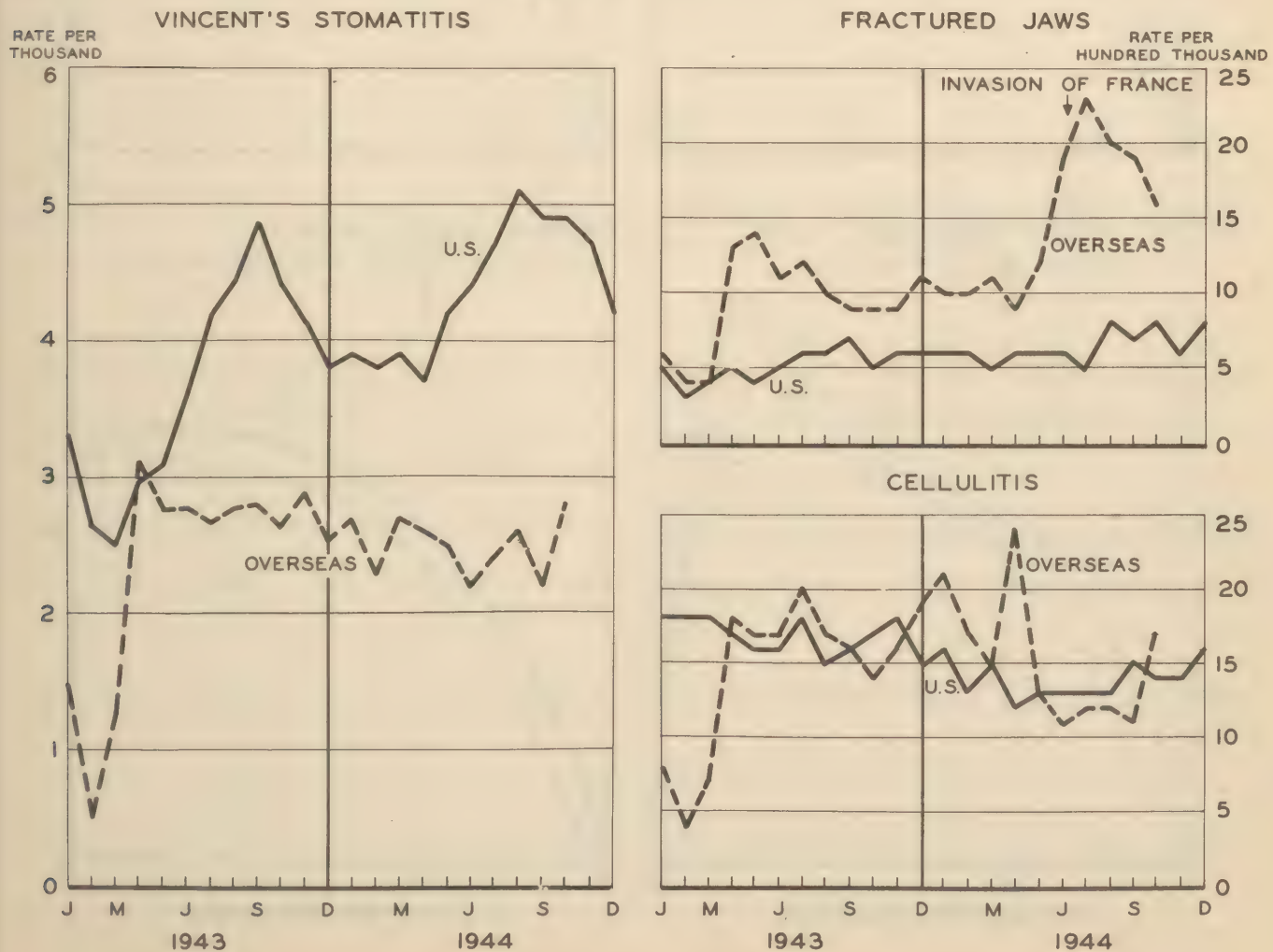
Despite its epidemic potentialities, Vincent's stomatitis, or trench mouth, has presented no serious problem during this war. There has been a gradual rise in the rate of admission in the United States since early in 1942, with a peak of 5.2 per thousand per month during August 1944, but the rate has been consistently below the level which might be expected in time of war. Following the sharp rise in March and April 1943, the overseas rate has remained fairly constant at less than three per thousand per month. However, the overseas incidence has been generally higher in areas where troops are in relatively close contact with the civilian population. In this war there is no evident relationship between combat and the frequency of Vincent's stomatitis.

In contrast, the rate for fractured jaws reflects combat activity to a marked degree. The precipitate increase in jaw fractures overseas for June and July of 1944 can be attributed to the invasion of the Continent and also, in some measure, to the hedge type of warfare during the initial phase of the operation.

Cellulitis, a result of dental infection, has been slightly more frequent among overseas troops during 1943 and 1944 than among troops in the continental United States. After its rise to the peak of 24 per hundred thousand men per month in April 1944, the overseas rate has declined again to approximately that for the continental United States. The two high points in January and April of 1944 resulted from increases in the European Theater in the pre-invasion months when large numbers of troops arrived in England. The most significant rise among the overseas troops was in March and April of 1943 when the rate jumped from about eight to 18.

The rate for osteomyelitis has been consistently low throughout the war, ranging from .5 to .8 per hundred thousand men per month.

## DENTAL INFECTION AND INJURY PER THOUSAND OR HUNDRED THOUSAND MEN PER MONTH



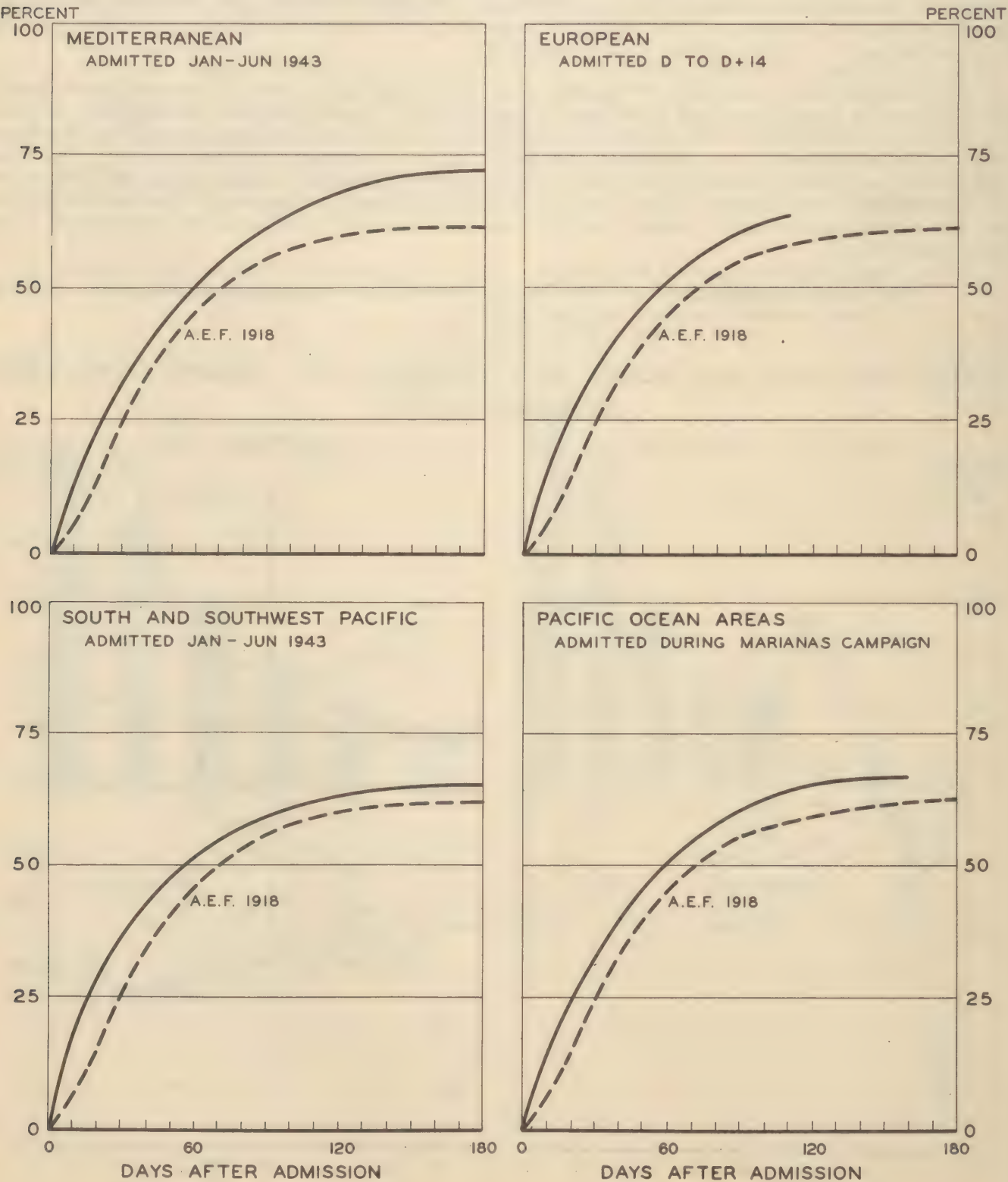


# DISEASE AND INJURY

## RETURN TO DUTY IN OVERSEAS THEATERS

The rate at which hospital patients are returned to duty overseas is strikingly similar from theater to theater. This similarity in the ability to return patients to duty in all overseas theaters is all the more remarkable when one considers the variable factors influencing the convalescence of the sick and wounded. In the case of wounded for example these factors are: (1) the general condition of the casualties prior to wounding; (2) the character and locations of wounds; (3) the organizational factors influencing convalescence

PERCENT OF WOUNDED PATIENTS RETURNING TO DUTY AFTER GIVEN NUMBER OF DAYS IN HOSPITAL, OVERSEAS THEATERS



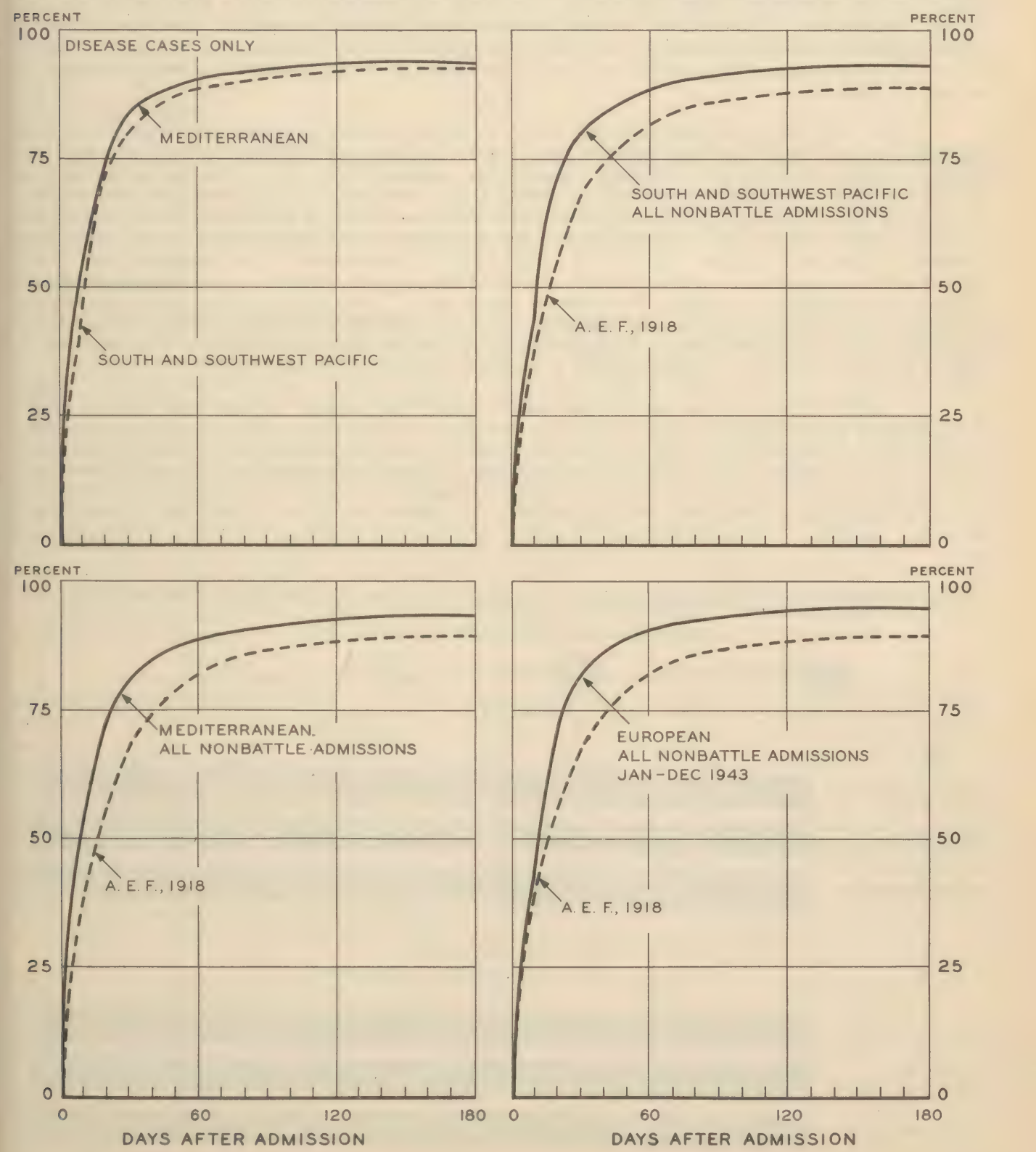


# DISEASE AND INJURY

## RETURN TO DUTY IN OVERSEAS THEATERS (Continued)

such as the time elapsing between wounding and surgical treatment and the time required for evacuation; and (4) the calibre of professional care afforded. The panels above show the percentage of wounded who had returned to duty within each of several theaters at the end of a given number of days. The curves represent the experience of January-June 1943 admissions in the South and Southwest Pacific and in the Mediterranean, of D to D+14 admissions in the European Theater, and of the Army wounded in the Marianas Campaign. The curve for the Euro-

PERCENT OF NONBATTLE PATIENTS ADMITTED JANUARY-JUNE 1943, RETURNING TO DUTY AFTER GIVEN NUMBER OF DAYS IN HOSPITAL-OVERSEAS THEATERS





# DISEASE AND INJURY

## RETURN TO DUTY IN OVERSEAS THEATERS (Continued)

pean Theater is based on a sample of about 2,000 wounded received in general hospitals in the United Kingdom, and the Marianas Campaign material is of similar size.

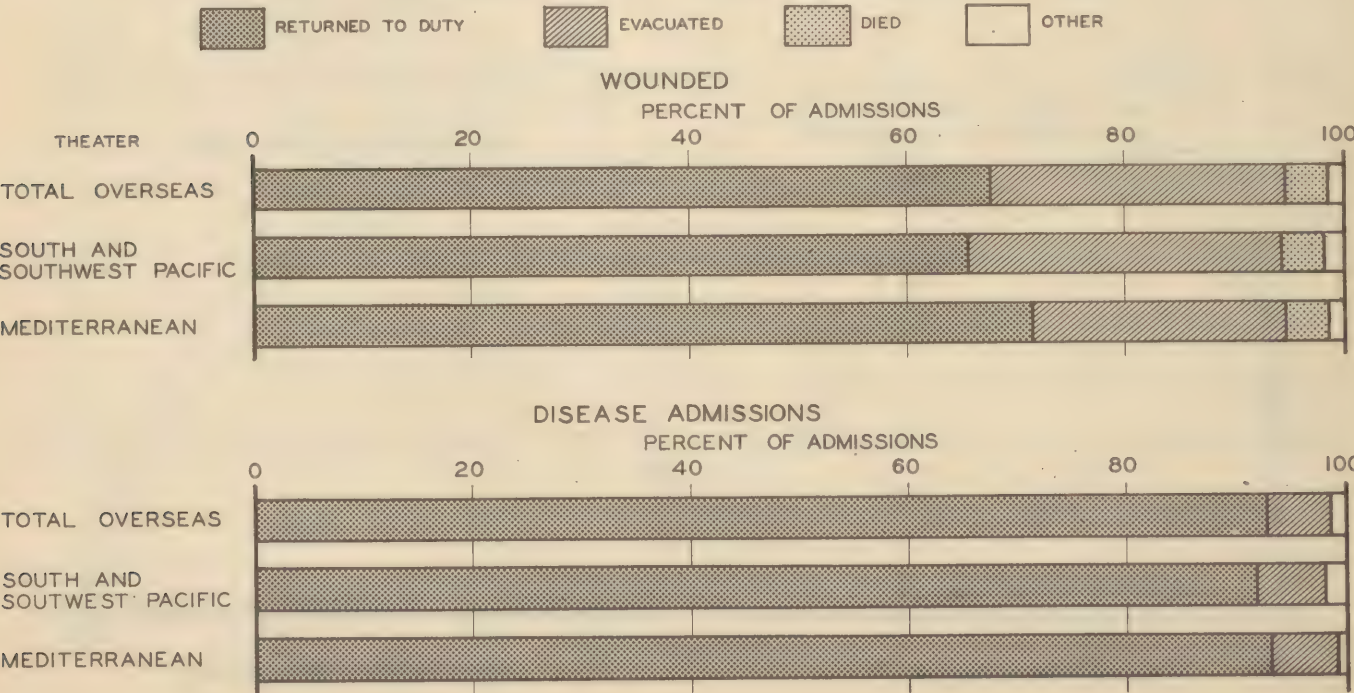
Although the data cover different time periods, there is no suggestion that there has been any substantial change in the average rate at which wounded return to duty. It seems possible that later data on return to duty in the Mediterranean and European Theaters may show some improvement over the 1943 experience because of more widespread and successful employment of secondary closure in the surgical management of wounds (see HEALTH for September 1944). However, important reductions in evacuation policy would have the opposite effect and would impair such comparisons unless the experience of evacuees were also taken into account. At the end of 120 days 64 to 68 percent of the wounded had been returned to duty in all four instances. In order to stress their virtual identity, each of the four curves is plotted against the corresponding curve for the AEF in 1918, although the World War I curve is not strictly comparable because many men were quickly evacuated with the abrupt ending of the war in 1918.

In the chart on page 21 the rate at which disease patients are returned to duty is shown for the Mediterranean Theater and for the South and Southwest Pacific Areas from January through June 1943. As in the case of the wounded there is little variation between the two curves. Analogous curves for nonbattle injury are very similar, and for that reason, and also in order to facilitate comparison with the World War I experience, the other four panels give the proportions of both disease and injury patients returning to duty for several theaters. The stability of the current experience is remarkable. The observations do not warrant close comparison for the purpose of demonstrating the greater effectiveness of modern therapeutic methods in contrast to those of World War I, not only for the reason mentioned but also because of differences in diseases. It is, however, well-known that certain therapeutic advances have had important military value during the present war. One outstanding example is the treatment of syphilis and gonorrhea, discussed on pages 16 to 18.

About thirty-two percent of all men wounded from January through June 1943 in overseas theaters were permanent losses to the theaters at the end of 360 days. Twenty-seven percent were evacuated, four percent died of wounds, and one percent were disposed of otherwise. Of the disease admissions in all theaters for the period January through June 1943, only seven percent were not returned to duty overseas, six percent of whom were evacuated. The bar charts below summarize the disposition of admissions to hospital for the South and Southwest Pacific, the Mediterranean Theater, and for all theaters for January through June 1943.

## DISPOSITION OF ADMISSIONS TO HOSPITALS IN OVERSEAS THEATERS

### PATIENTS ADMITTED JANUARY-JUNE 1943





---

## DISEASE AND INJURY

---

### HEALTH BRIEFS

#### Meningococcic Meningitis

For troops in the United States the January and February 1945 admission rates for meningococcic meningitis are considerably below those for the winter months of both 1943 and 1944. Rates of .5 and .6 per 1,000 men per year are reported for January and February of the current year in comparison to 1.0 and 1.1 in 1944, and 2.1 and 2.5 in 1943. March has been the month of peak incidence for meningococcic meningitis for the past two years, and it is probable that the rate will rise somewhat during the coming month, although it is not expected to meet the level of the past two years.

Among the factors responsible for the current favorable experience among Army troops is a lower incidence in the civilian population, the smaller proportion of newly inducted men (the most susceptible), lessened crowding of barracks, and the prophylactic use of sulfonamides.

#### Respiratory Disease

The most favorable respiratory season in the continental U. S. in many years has continued through the month of February. At 209 per thousand men per year, the admission rate for the first week in February was the highest yet reported for the winter of 1944-45, and by the end of the month the rate had declined to 202. The average rate of 207 for the entire month is the lowest recorded February rate for troops in the U. S. since 1914.

#### Schistosomiasis

An infectious disease of the liver and intestines which in the Far East is caused by the parasitic worm, Schistosoma japonicum, schistosomiasis has made its appearance among U. S. troops in the Philippines. Unless effective treatment is instituted in the early stages, schistosomiasis may result in serious, crippling disease and is a threat to life. Weekly telegraphic reports mention about 200 cases diagnosed prior to 16 February, but it is known that other patients under observation were suspected of having been infected with the parasite. Based on the number of men exposed by swimming in water known to be infested with the fork-tailed larvae, known as cercariae, which penetrate the skin to the blood stream, it is expected that from 500 to 2,000 cases may eventually develop from exposure in the Philippines, many of whom will require evacuation to the Z/I for hospitalization and treatment.

As reported in HEALTH for December, the disease is endemic in the southern Philippine Islands of Leyte, Samar, Mindoro, and Mindanao. It is common in certain districts in China, notably the whole Yangtze valley, the coastal areas and the Mekong valley, and endemic centers are also reported at Shuichow near Canton and at Foochow. Five comparatively small foci are known to exist in Japan, and the disease has also been found on Formosa.

Surveys to determine the presence of the species of snails which serve as intermediate hosts and examinations to disclose the frequency of infection in the snails and in the native population are essential for an effective program of control. The parasite spends a part of its life cycle in the snail; the larval form which emerges into the surrounding water is able to penetrate the unbroken skin of humans. In areas of proven or possible endemicity control measures are designed principally to prevent ingestion or contact with contaminated fresh water from ponds, ditches, streams, and even rivers. Troops should avoid wading, bathing, or washing clothes in such water. They should obtain their water supply from newly-driven casings reaching a depth of ten feet or more. Where water must be drawn directly from streams, rapidly running water is preferred. When Lyster bags or larger storages are used, a chlorine residual of one part per million at the end of 30 minutes insures water safe from cercariae of schistosomes. Two Halazone tablets per canteen for clear water and four for turbid or colored water with 30 minutes contact provide safe water.



# HOSPITALIZATION

**SECRET**

## HOSPITALIZATION OVERSEAS

The following tables summarize the bed situation in overseas theaters on 31 January 1945, the latest date for which reasonably complete information is available. The counts of beds present and under orders are based upon the 1 February 1945 Troop List for Operations and Supply. The numbers of beds shown as present in each theater include all of those in units assigned to the commanding general of an area, regardless of the possible attachment of some of these units to another theater. Theater counts of beds present might differ from those listed below by the inclusion or exclusion of some units under orders, or the non-reporting of beds present but not set up. The reports of occupancy and total fixed beds available are more preliminary, being based upon theater radio reports to The Surgeon General.

### FIXED BED UNITS AVAILABLE AND OCCUPIED

Number of Beds, 31 January 1945

Theater	W. D. Authorization	T/O Present c/ Number      Percent of Authorization		T/O c/ Under Orders	Total Fixed Available d/ e/	Total Occupied d/ f/
All Theaters	342,390	317,925	92.9	26,850	446,926	264,833
American a/	4,848	5,925	122.2	-	9,094	2,884
European	198,293	186,950	94.3	17,400	303,894	190,937
Mediterranean	34,765	29,125	83.8	-	31,775	21,415
Pacific						
Total	82,707	76,650	92.9	8,500	79,824	39,886
POA	(29,669)	(29,750)	(100.3)	(3,500)	(29,451)	-
SWPA	(53,038)	(46,900)	(88.4)	(5,000)	(50,373)	-
Asiatic	19,154	16,000	83.5	950	18,428	8,531
Middle East b/	2,623	3,275	1,249	-	3,911	1,180

### Beds as Percent of Strength

Theater	Strength in g/ Thousands	W. D. Authorization	T/O Present c/ Total      Usable l/		Beds Occupied d/ e/ Percent of      Percent of Strength      T/O Present	
All Theaters	5,137 h/	6.7	6.2	5.0	5.2	83.3
American a/	162	3.0	3.7	2.9	1.8	48.7
European	2,833	7.0	6.6	5.3	6.7	102.1
Mediterranean	527	6.6	5.5	4.4	4.1	73.5
Pacific						
Total	1,252	6.6 k/	6.1	4.9	3.2	52.0
POA	(494) 1/	(6.0)	(6.0)	-	-	-
SWPA	(758) 1/	(7.0)	(6.2)	-	-	-
Asiatic	319 1/	6.0	5.0	4.0	2.7	53.3
Middle East b/	44	6.0	7.5	6.0	2.7	36.0

a/ Includes Alaskan Defense Command and excludes the Northwest Service Command and Eastern and Central Canada.

b/ Includes Persian Gulf Command.

c/ T.L.O.S. dated 1 February 1945.

d/ Reported by theater, 2 February 1945.

e/ As of 26 January for ETO. Includes expansion equipment, and units staging, under orders, and constructing.

f/ As of 26 January for ETO. May include some mobile convalescent beds occupied.

g/ Ration strength as shown in T.L.O.S., 1 February 1945. Excludes en route.

h/ One thousand too great because of rounding.

i/ POA assigned strength in Philippines, excluded from SWPA total.

j/ Includes 86,000 Chinese.

k/ Average of authorizations for POA and SWPA.

l/ Eighty percent of total T/O present.

**SECRET**



HOSPITALIZATION

SECRET

HOSPITALIZATION OVERSEAS (Continued)

Except in the case of the Southwest Pacific and Pacific Ocean Areas, the strengths used are the U. S. Army ration strengths which include all U. S. Army personnel assigned to the commanding general of the theater, units under the Commanding General, Army Air Forces, and War Department Groups within the geographical limits of the various areas and subsisted by the Army. The strength shown for Pacific Ocean Areas includes the strength assigned to this command but attached to the Southwest Pacific for operational purposes. This strength is, in turn, excluded from the total for the Southwest Pacific. The strength shown for the American theaters excludes U. S. Army strength in the Northwest Service Command and in Central and Eastern Canada. The Northwest Service Command does not operate on the basis of an authorization for fixed bed units, but on an allotment system similar to that employed in the continental United States. The forces in Canada do not have any fixed units, only dispensary beds. The strength of the Asiatic theaters includes 86,000 Chinese troops, the number reported telegraphically as being in India-Burma at the end of January. The Army is committed to provide fixed hospitalization for Chinese units at 6 percent of their strength in India-Burma up to a total of 102,000 men.

The hospitalization data on bed occupancy for the Pacific Ocean and Southwest Pacific Areas have been combined for purposes of presentation because of the attachment to the Southwest Pacific of 74,000 men assigned to the Pacific Ocean Areas. The authorization of fixed bed units for these troops is based upon the 6.0 percent for the Pacific Ocean Areas. However, since their medical reports are submitted through Southwest Pacific channels, relating the number of beds occupied in Pacific Ocean Areas to the number of beds present would understate the proportion of beds being utilized. In addition, as of 31 January, two field hospitals, two station hospitals (one of 750 beds, and one of 500 beds) and three portable surgical hospitals assigned to the Pacific Ocean Areas were present in the Philippines, and the extent of the utilization of these units by Pacific Ocean Areas personnel is not known. In the tables below these units are considered as present in the Pacific Ocean Areas. The joint authorization for fixed bed units in the two areas was 82,707 on 31 January, 53,038 being for 758,000 Southwest Pacific personnel. The number of beds occupied in the two areas was 39,886, of which the Southwest Pacific Area reported 28,361. The number of fixed T/O units in the American theaters and in the Middle Eastern Theater and the Persian Gulf Command is greater than the number of authorized units in these areas because of the lag between the decline in troop strength and the reassignment of hospital units.

MOBILE (INCLUDING MOBILE CONVALESCENT) BEDS AVAILABLE AND OCCUPIED

Theater	Number of Beds			Percent of Strength		Occupied as Percent of T/O Present
	T/O Present c/	Under Orders c/	Total Occupied d/ m/	T/O Present	Total Occupied	
All Theaters	82,700	3,625	29,835	1.6	0.6	36.1
American	-	-	-	-	-	-
European	54,600	3,600	16,076	1.9	0.6	29.4
Mediterranean	8,400	-	3,219	1.6	0.6	38.3
Pacific Areas						
Total	14,000	-	6,790	1.1	0.5	48.5
POA	(4,050)	-	(875)	(0.8)	-	-
SWPA	(9,950)	-	(5,915)	(1.3)	-	-
Asiatic	5,700	25	3,750	1.8	1.2	65.8
Middle Eastern b/	-	-	-	-	-	-

b/ Includes Persian Gulf Command  
c/ T.L.O.S. dated 1 February 1945.  
d/ Reported by theater, 2 February 1945.  
m/ May include some fixed convalescent beds occupied.



RESTRICTED

## HOSPITALIZATION

~~SECRET~~

### HOSPITALIZATION OVERSEAS (Continued)

As of 1 February, 82,700 mobile and mobile convalescent beds were reported in overseas theaters according to the Troop List. Only in the Asiatic theaters, where 66 percent of the number of beds present were occupied, was the occupancy ratio greater than 50 percent. On 31 January the number of T/O fixed beds present overseas amounted to 93 percent of the authorized T/O fixed capacity. This represented a decline of about 3 percent below the comparable figure for 31 December.

The need for hospitalizing prisoners and occasionally members of the other U. S. armed forces, civilians, and neutral and allied military personnel constitutes a drain on the available hospital beds in certain overseas theaters. The table below details the percentage distribution of bed occupancy by type of patient in the various overseas theaters. The data shown are the latest available from each theater. Plans for the hospitalization of prisoners of war patients in the European Theater are discussed on pages 28-30.

FIXED AND MOBILE BEDS OCCUPIED, OVERSEAS THEATERS  
By Type of Patient

Theater	Date	Total a/ Beds Occupied	Percent of Total Beds				
			Army	Other U. S.	Allies and Neutrals	POW	Civilians
All Theaters	-	269,010	90.0	0.4	3.0	5.8	0.8
Alaska	26 Jan '45	785	88.1	0.3	0.3	-	11.3
Latin American	26 Jan '45	1,864	97.0	0.2	0.1	-	2.7
European	12 Jan '45	189,562	90.9	0.2	1.0	7.7	0.2
Mediterranean	27 Jan '45	25,166	90.0	0.2	6.9	2.3	0.6
Pacific Ocean	29 Dec '44	10,654	85.8	6.5	0.1	2.9	4.7
Southwest Pacific	24 Nov '44	28,571	96.2	0.3	0.9	0.2	2.4
Asiatic	29 Dec '44	11,053	61.4	0.2	37.7	0.2	0.5
Mediterranean	29 Dec '44	1,355	91.7	2.1	0.9	-	5.4

a/ From MD Form 86ab and more complete than telegraphic reports for the same dates.

According to the 24th revision of the WD Six Months Troop Forecast, the theater requirements for fixed hospital units established by OPD will be fully met by the projections for April, June, and July, except in the case of the Asiatic theaters at the end of April, when the difference is very slight. However, when the projected T/O capacity for each theater is related to the strength projections published in the Troop List for Operations and Supply for 1 February 1945, the resulting percentages are well below the WD authorized percentages for fixed bed units for the Mediterranean and Asiatic theaters and the Pacific Ocean Areas. The strength used for the Asiatic theaters includes 102,000 Chinese. The Troop List strength projections may well be too high, but if they should prove to be correct, in June and July these three theaters would have shortages of 11 to 17 percent below their respective WD authorized levels.

~~SECRET~~

RESTRICTED



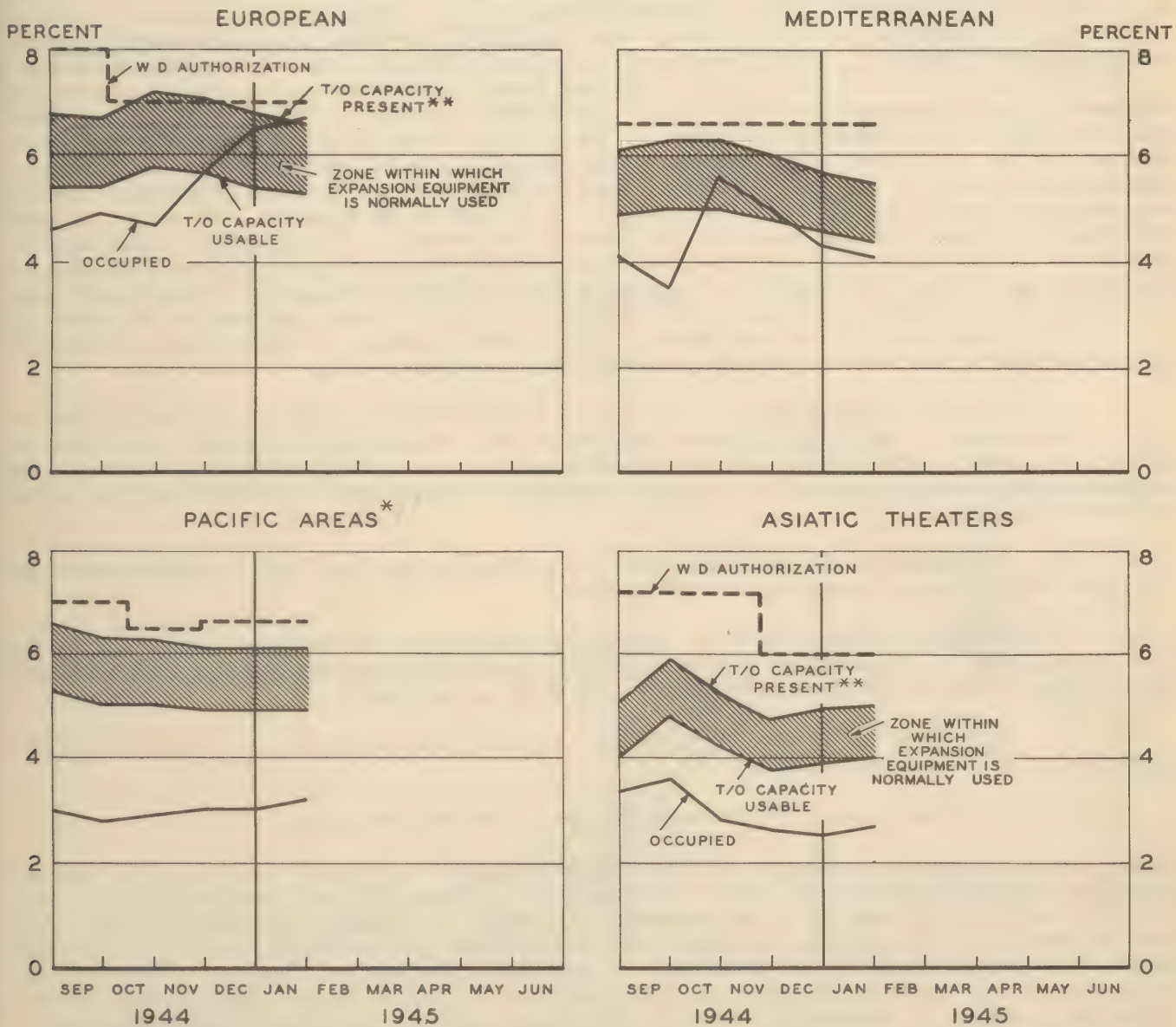
HOSPITALIZATION

SECRET

HOSPITALIZATION OVERSEAS (Continued)

The panels at the bottom of the page give the recent changes in the availability and occupancy of fixed beds in the more active theaters since the beginning of September 1944. The shaded band on each panel gives the range of occupancy within which the use of expansion equipment is usually necessary so that an occupancy line in this area is evidence of pressure upon the supply of fixed beds in the theater. The pressure may be even greater than indicated, for in some instances a considerable number of units may be staging, in construction, and the like, so that expansion facilities must often be used earlier than the charts show. In these instances, however, some of the personnel of units staging and under construction should be available for attachment to operating units expanded beyond T/O capacity. In none of the theaters except the European is the fixed bed situation characterized by crowding. There, however, 102 percent of the fixed T/O beds present in the theater were occupied at the end of January. To meet the need for hospital beds the theater has expanded its T/O capacity by about 62 percent, reporting 304,000 fixed beds available. Part of the total of 304,000 beds may well represent the capacity of prisoner of war hospitals recently set up outside the theater troop basis. On 21 February, however, 181,209 fixed beds were reported as occupied. This amounts to only 96 percent of the T/O fixed bed capacity present on 31 January.

FIXED HOSPITALIZATION OVERSEAS THEATERS  
BEDS AS PERCENT OF STRENGTH



\* Southwest Pacific and Pacific Ocean Areas.  
\*\* Exceeds T/O capacity of units set up by capacity of units staging, etc.



RESTRICTED

## HOSPITALIZATION

SECRET

PROBLEMS OF HOSPITALIZATION AND EVACUATION IN THE EUROPEAN THEATER

The hospital population in the European Theater built up quite rapidly during June, July, and August, but the lower battle casualty rates of September and October permitted a temporary stabilization at a level which did not immediately threaten to overtax available fixed hospital bed capacity. Evacuation from the theater failed to keep pace with the admission experience until November, chiefly because the available but less desirable troop transport capacity was not fully utilized and air lift declined below its peak contribution during July and August. Early in July the first general hospitals were established on the Continent, but at the end of August only about 7,500 capacity was in operation. Thereafter operating fixed bed capacity on the Continent increased to about 53,000 T/O beds at the end of the year. In consequence of lack of plants in which to install hospitals, a considerable part of the limited fixed bed capacity on the Continent could not be used for the definitive care of patients, being diverted from its intended function to that of holding units in order to maintain a safety factor of vacant beds. This was especially true at Liege and Paris. One consequence was that many patients were evacuated much farther to the rear than their condition warranted, thus interfering with their early return to duty.

In view of the difficulties anticipated in meeting the long-standing eight percent War Department fixed bed authorization level for the European Theater as well as those for certain other theaters, the need in the European Theater was re-examined on the basis of the experience of the first few months after D-day and lowered to seven percent early in October 1944, when the evacuation policy was reduced from 180 to 120 days. Late in November the authorized levels of several other theaters were reduced for the same reason. It is believed that a sufficient number of fixed units was placed at the disposal of the theater, but the difficulties of employing them effectively were such that the capacity in use showed signs of crowding during November. A War Department directive in November that troop transport capacity be used more fully for patient lift provided immediate relief, for the evacuees from the European Theater increased from about 9,000 in November to about 17,000 in December. However, the impact of casualties sustained in the Allied offensive in November, coupled with those of the Battle of the Bulge, and the great number of trench foot casualties sustained in November and December, all led to further deterioration in the hospital situation. Fixed beds occupied rose from 149,000 on 2 December to 176,000 on 29 December, 80 and 96 percent respectively of the total T/O capacity of fixed units present in the theater, regardless of whether or not the units were in operation. Since about 19 general hospitals were staging at the end of the month, the crowding of operating facilities was even greater than the 96 percent utilization indicates. Despite the availability of lift for more than 20,000 patients monthly, the immediate outlook was one of a continued increase in the patient census and further strain on the hospitalization system as then operating.

The solution did not appear to consist in an increase in the fixed bed authorization to the theater, but rather in such changes in the utilization of already existing and authorized capacity which would permit further expansion in the hospital census. Efforts are currently being made to maximize the value of available and projected general hospitals along the following lines:

1. Shortening lines of evacuation by locating on the Continent a maximum number of the fixed hospital beds available to the theater;
2. Reorganization of station and general hospitals to increase their capacity by 14,400 fixed beds in compensation for recognition that field hospitals having this aggregate capacity were actually being used as mobile beds with the armies;
3. Provision of fixed convalescent capacity equivalent to 20 percent above the authorized fixed bed capacity; and
4. Organization of PW hospitals staffed by German personnel.

In addition, War Department action in November authorized the theater to reduce its 120-day evacuation policy to 90 days or less if necessary to utilize fully all available lift. Further lift was recently assured by arrangements with SHAEF to increase air evacuation to 4,000 patients monthly. It has been estimated that accelerated evacuation to the Z/I has had the effect of releasing about 15,000 fixed beds. Evacuation was also an important factor in the bed situation in the Southern Line of Communications during January, for the absence of a single ship capable of evacuating patients from Marseilles for more than a month contributed to the overloading of hospitals in the southern evacuation chain. This situation was relieved late in January.

SECRET

RESTRICTED



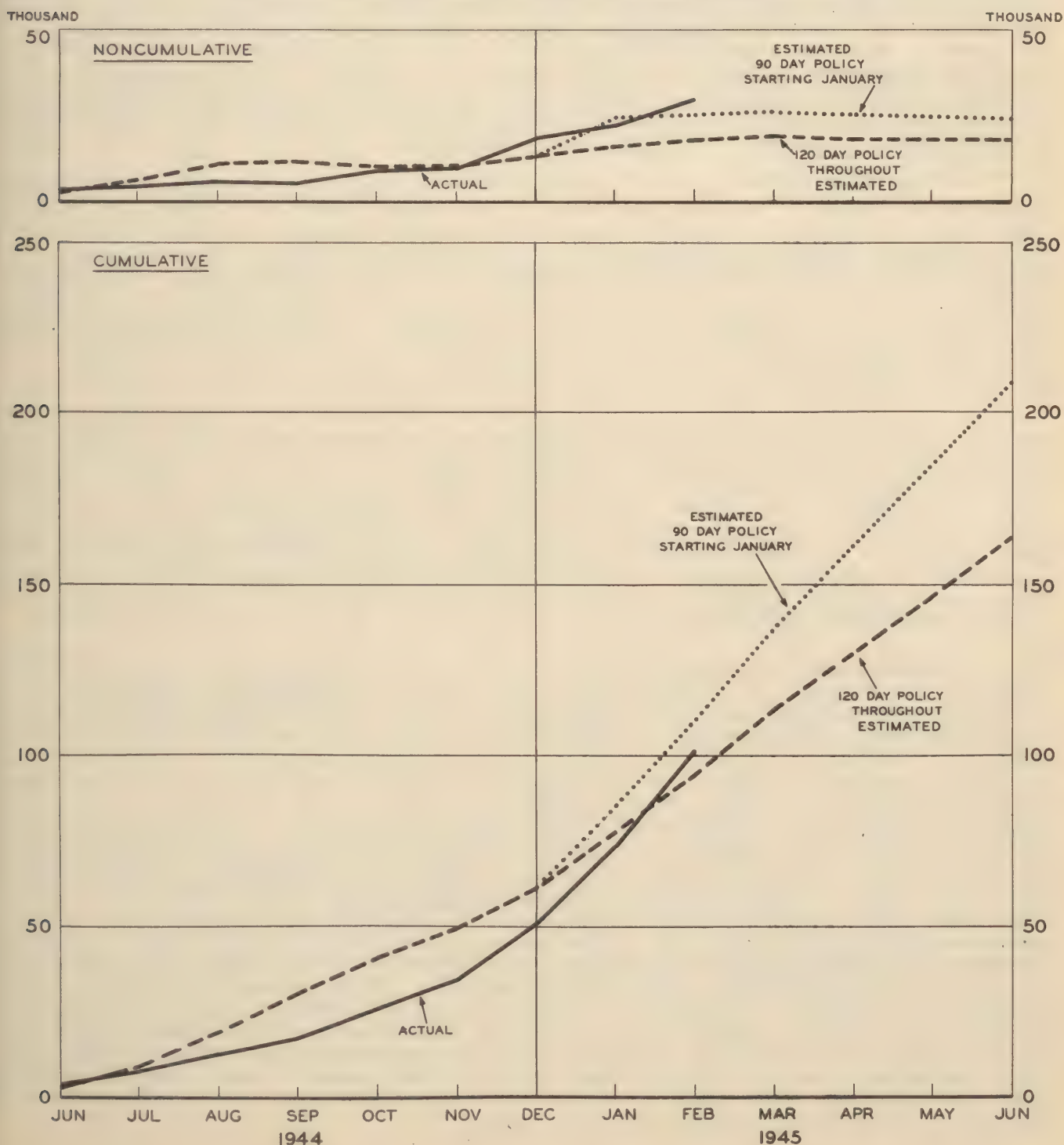
## HOSPITALIZATION

SECRET

## PROBLEMS OF HOSPITALIZATION AND EVACUATION IN THE EUROPEAN THEATER (Continued)

The establishment of general hospitals on the Continent had been delayed by numerous factors (see HEALTH for January) but it is believed that the chief difficulties have now been overcome. For example, the placing of high priority upon the movement of prefabricated buildings from the United Kingdom will alleviate the extreme shortage of suitable buildings which has interfered with the speedy location of the large general hospitals. The general hospitals which were staging on the Continent early in January, plus others to be moved from the United Kingdom, are to be placed in operation as quickly as possible. The immediate objective is the location of 100,000 T/O fixed bed capacity on the Continent, and the necessary sites have already been agreed upon. During January operating fixed bed capacity on the Continent rose from 53,000 to 68,000 beds and on 24 February 76,550 beds were reported. Ulti-

### ACTUAL AND ESTIMATED NUMBER OF ARMY PATIENTS DEBARKED IN THE U.S. EVACUEES FROM THE EUROPEAN THEATER





RESTRICTED

## HOSPITALIZATION

~~SECRET~~

### PROBLEMS OF HOSPITALIZATION AND EVACUATION IN THE EUROPEAN THEATER (Continued)

mately, all or virtually all of the fixed beds in the theater should be placed on the Continent. Increasingly it should be possible to employ fixed units exclusively for the definitive type of care for which they were intended, reducing the number of transfers from one hospital to another and shortening the length of evacuation for a large portion of the patients entering the evacuation chain. One estimate, made in January, suggests that in the line of evacuation from the First, Third, and Ninth Armies through Paris and Cherbourg to the United Kingdom perhaps as many as 30 percent of the patients were being evacuated farther to the rear than would be desirable from the standpoint of their early return to duty.

The field hospital platoon has been extensively employed as a mobile surgical hospital in both the Mediterranean and European Theaters. Reinforced with surgical teams it is typically located near a clearing station and accepts the non-transportable cases. When thus used, its inclusion as a charge against the fixed bed authorization reduced the effective bed capacity available to the theater. War Department action in December to delete such units from the fixed bed basis permits the reorganization of station and general hospitals so as to extend their capacity by 14,400 beds in the European Theater, no additional medical personnel being required. Implementation of this reorganization requires additional equipment, the provision of which was directed in January. In view of the almost provisional character of the field hospital when used as a mobile, forward unit in support of the clearing station, it has been suggested that a unit be specifically designed for this purpose. On the basis of lessons learned in the European Theater tentative plans have been made for the development of a mobile surgical hospital of perhaps 50-bed capacity.

The provision of additional convalescent facilities on the Continent is considered desirable as a means of lessening the burden on the general hospitals. A review of the characteristics of patients in general hospitals in January suggested that about 20 percent of patients could be cared for appropriately in convalescent facilities if these were available. The War Department has asked the theater for its recommendations as to the organization of units of this type, which would be in addition to the fixed beds in the troop basis, but would not carry any additional increase in personnel. It now seems possible that such additional capacity may be approved to the extent of 20 percent of the authorized fixed beds. The theater has personnel available for this purpose.

On 29 December there were about 14,000 PW patients in U. S. fixed hospitals in the theater, roughly 4.5 percent of the PW population in the Communications Zone. With the increasing number of German prisoners of war there was every expectation that the PW census would increase very markedly before V-E Day, further contributing to the pressure on fixed beds in the theater. The theater is now organizing PW hospitals staffed with PW personnel, which should materially alleviate this situation. It is anticipated that up to 54,000 PW beds may have to be established for this purpose, 13,000 of which were in organization early in February. The War Department is providing suitable hospital assemblies for establishing these units, each one of which will also require a small cadre of U. S. Army personnel, including one Medical Corps officer.

The European battleground has subjected Army hospital units to the severest of tests, yet surprisingly few changes in basic organization seem required. Much of the difficulty experienced to date has derived from inability to get general hospitals into operation on the Continent quickly enough to prevent others from being diverted from their intended function of definitive care. The forced reduction in evacuation policy from 120 to 90 days or less is one price which it has been necessary to pay. Were the war in Europe to end quickly this reduction, productive of a considerable increase in the volume of evacuation, would merely facilitate redeployment. Were the war to continue at its present intensity through June 1945, the change from a 120 to a 90-day policy during December would result in the evacuation of perhaps 43,000 additional men during the six-month period. The accompanying chart compares, in both cumulative and noncumulative form, actual evacuation to the Z/I since June 1944, with that expected under a 120-day policy through December 1944, and projects evacuation through June 1945 on the basis of both 120- and 90-day policies. The projections are based on the study of evacuation policy published in HEALTH for December 1944, and on forecasts of admission rates through June 1945. It is assumed that patients will be evacuated according to the conservative optimum evacuation schedule, defined and illustrated in HEALTH for December. Evacuation to the Z/I was considerably below the number expected under a 120-day policy from D-Day through November, but increased greatly during December, January, and February and will probably remain high for some months to come, despite the action taken during January and February to correct the hospital situation. Until early October, of course, the theater had a 180-day evacuation policy.

~~SECRET~~

RESTRICTED



HOSPITALIZATION

SECRET

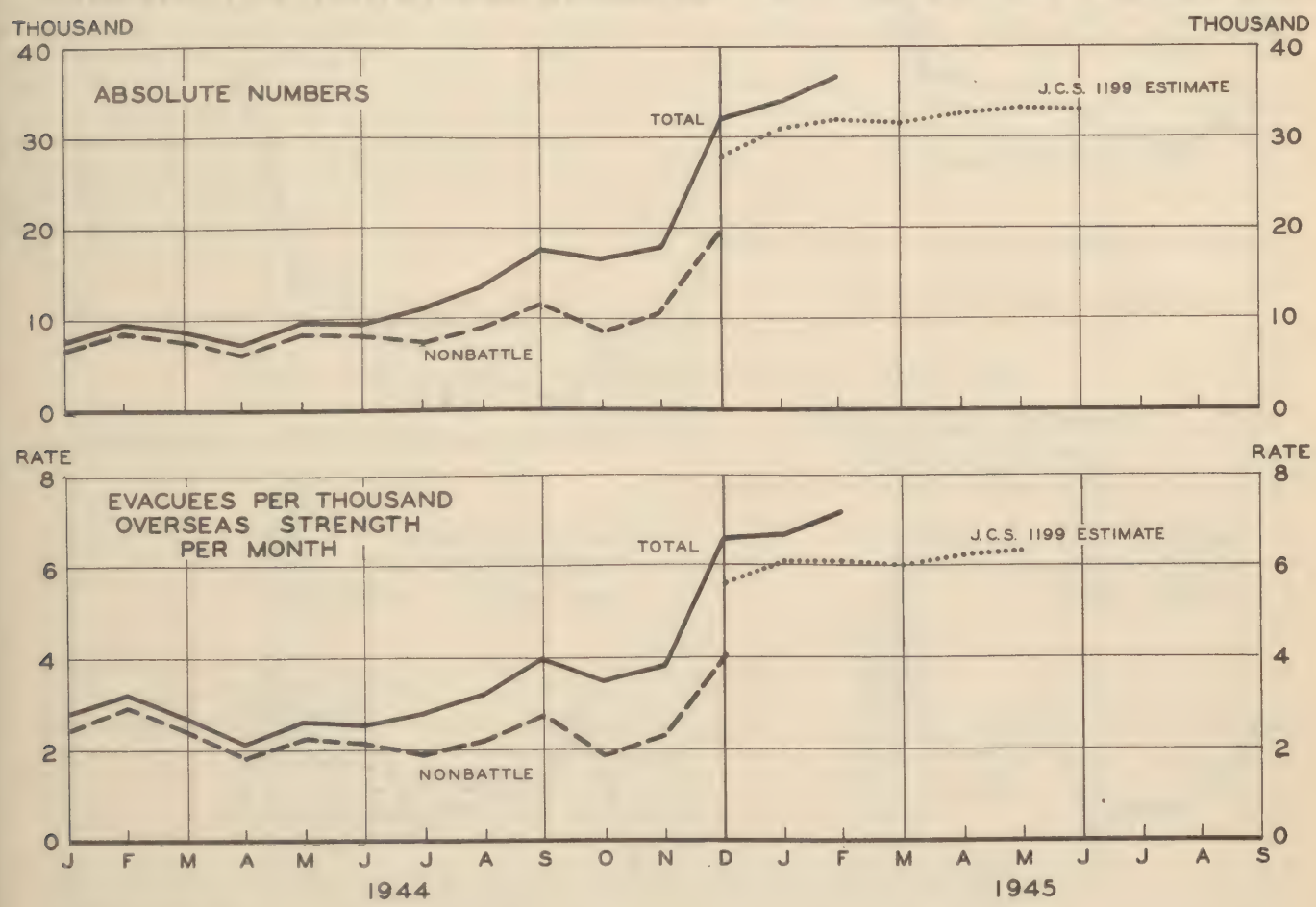
TREND OF EVACUATION FROM OVERSEAS

During February there was a further advance in the volume of overseas patients debarked in the Z/I, the provisional total of 36,800 being 3,000 above the January count and yielding a total overseas rate of 7.2 per 1,000 strength per month. Ships returning from the European Theater alone debarked 27,500 Army patients during February, an increase of 7,600 over the January total of 19,900. Ample lift is available to continue the current volume of evacuation from the European Theater for another month or more. The air lift in February was the highest yet achieved, the preliminary count being 5,400 patients, and 15 percent of the total.

The forecasts developed in J.C.S. 1199 are shown below through June 1945 as a rough guide to the expected volume of evacuation for the next few months. Any projections such as these are necessarily tentative because of the uncertainty surrounding the strategic situation in Europe and the likelihood of rapid redeployment once V-E Day is at hand. The more certain victory appears the more anxious the European Theater will be to evacuate patients to the full extent of all available means. Once the flow of personnel is reversed by redeployment, however, patients will have to compete in part with high-priority, combat personnel and it may be difficult to maintain the current volume of evacuation.

Estimates of the proportion of battle and nonbattle patients received during the last quarter of 1944 are now available and have been added to the charts below. The temporarily heavy volume of patients from the Southwest Pacific did much to elevate the nonbattle segment of the load, which will probably not be sustained at the December proportion in future months. Less than half of the December patients from the European and Mediterranean Theaters were nonbattle patients.

ACTUAL AND ANTICIPATED EVACUATION OF PATIENTS\* FROM OVERSEAS



\* Army patients only



# HOSPITALIZATION

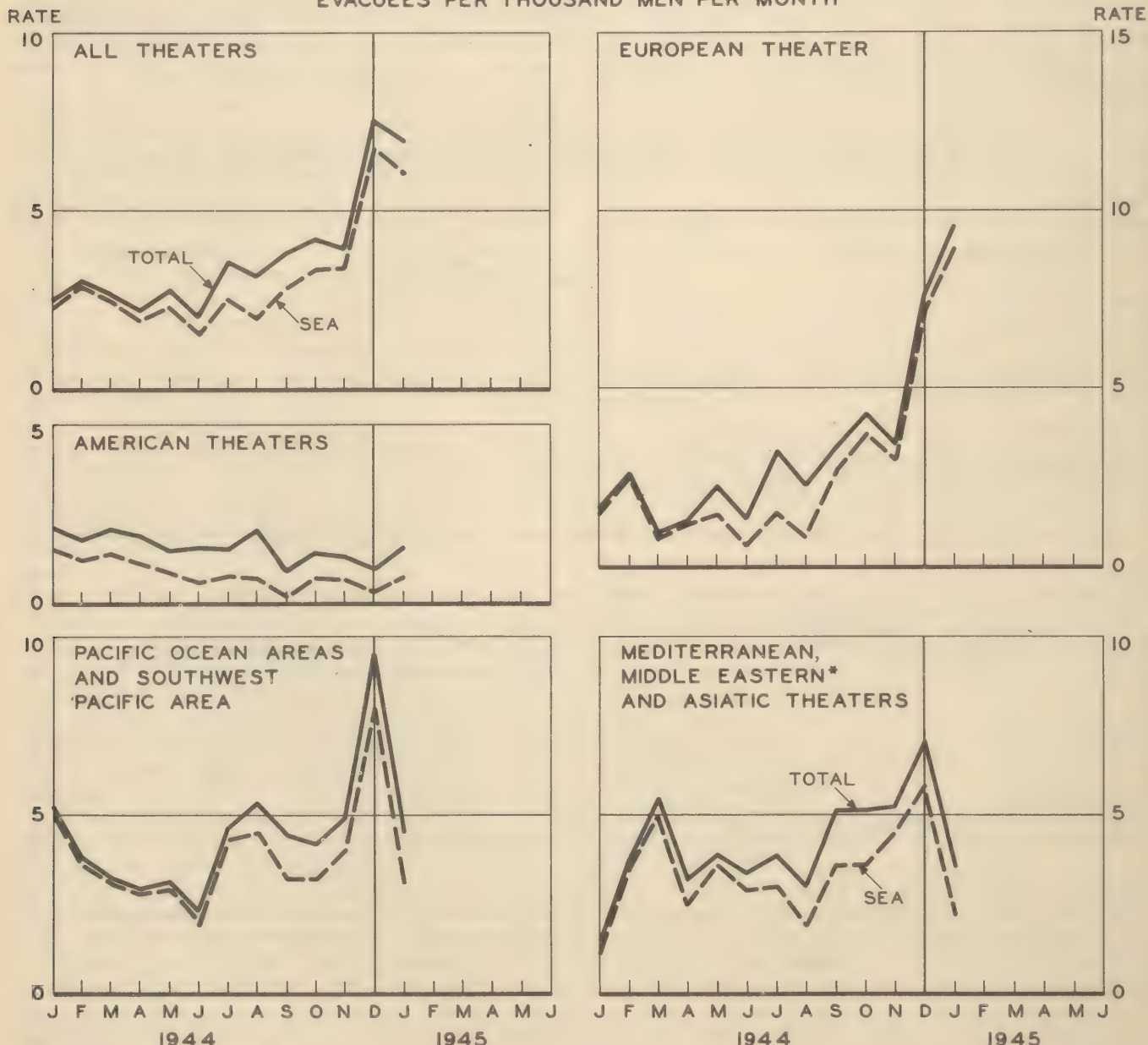
CONFIDENTIAL

## TREND OF EVACUATION OVERSEAS (Continued)

Viewed from the standpoint of numbers of patients embarked in the theaters, the volume of evacuation declined slightly during January under the influence of a marked reduction in patients shipped by the Southwest Pacific Area and the Mediterranean Theater. These changes more than offset the 6,000 increase in patients embarked by the European Theater in January. The evacuation rate for the European Theater rose further to about 9.5 per 1,000 men per month. The accompanying charts give the recent evacuation experience in rate form for the various theaters. The separation of the Pacific Ocean Areas and the Southwest Pacific Area has ceased to be very useful because of the presence of Pacific Ocean Areas combat troops in the Southwest Pacific, some of whom have been evacuated to Pacific Ocean Areas, and because of the extent to which personnel of the Southwest Pacific have been hospitalized in the South Pacific. Furthermore, transportation reports may not always reliably reveal the theater in which the evacuees were originally admitted to hospital. For these reasons the two Pacific theaters are no longer shown separately. The charts also give evacuees by water separately, permitting rough comparison of the volume of air and water transportation. The relative importance of air lift has greatly declined since the summer of 1944 in all groups of theaters except the American theaters.

## ARMY PATIENTS EVACUATED TO THE U. S. FROM OVERSEAS THEATERS

EVACUEES PER THOUSAND MEN PER MONTH



CONFIDENTIAL



# HOSPITALIZATION

RESTRICTED

## HOSPITALIZATION IN THE ZONE OF INTERIOR

### Patient Trend

Although February is a short month, the number of patients evacuated to the Zone of Interior exceeded the January peak. The total number evacuated amounted to 38,000, an increase of about 4,000 over January.

### U. S. ARMY PATIENTS EVACUATED FROM OVERSEAS\* July 1944-February 1945

Month	Army Evacuees Number
July 1944	10,566
August	13,970
September	16,630
October	17,437
November	17,852
December	31,350
January 1945	33,456
February	37,727

\* Based on patients processed through debarkation hospitals.

The evacuee inflow of 38,000 was reflected in a rise of 18,000 in the number of patients remaining in the general hospital system, which reached a new peak of 150,624. The extent to which the general hospital system has been expanding in the Zone of Interior can be highlighted by the statement that the number of patients has more than doubled during the past six months. During February, when 38,000 patients were received from overseas, there was a net gain of 18,000 patients in the general-convalescent hospital system, or a ratio of increases of one patient remaining for every 2.1 patients evacuated. The ratio in February was comparable to the July-November experience. The gain in patient census in February was, however, less steep than in December, when there was a ratio of increases of one patient remaining for every 1.7 evacuees and in January with a ratio of increases of one patient remaining for 1.4 evacuees.

### PATIENTS REMAINING IN GENERAL HOSPITAL SYSTEM\* January 1944-February 1945

End of Month	Patients Remaining	Percent Change from Previous Month
January 1944	61,094	
February	60,928	- 0.3
March	58,853	- 3.4
April	56,697	- 3.7
May	58,795	+ 3.7
June	59,579	+ 1.3
July	61,954	+ 4.0
August	69,367	+12.0
September	79,315	+14.3
October	87,282	+10.0
November	95,068	+ 8.9
December	108,640	+14.3
January 1945	132,842	+22.2
February	150,624	+13.4

\* Includes patients remaining under the jurisdiction of all general hospitals and all convalescent hospitals.

The build-up in the general hospital census is a function of two factors: the number of evacuees received from overseas and the duration of hospital stay. Although medical

RESTRICTED



# HOSPITALIZATION

## HOSPITALIZATION IN THE ZONE OF INTERIOR (Continued)

and neuropsychiatric patients can usually be treated and disposed of within a period of approximately three months, a much longer period is required for the effective treatment of surgical cases, of whom battle casualties compose the largest group. At the time of D-Day in France, there were fewer than 7,000 battle casualties remaining in the general hospital system in the Zone of Interior. This number increased rapidly and by November there were in excess of 28,000 battle casualties remaining or more than four times the June figure. February showed an approximately 100-percent increase over November and a 700-percent increase over June.

### BATTLE CASUALTIES REMAINING IN GENERAL HOSPITAL SYSTEM January 1944-February 1945

End of Month	Battle Casualties Remaining	Percent Change from Previous Month
January 1944	4,233	
February	4,200	- 1.0
March	4,823	+14.8
April	5,302	+ 9.9
May	6,294	+18.7
June	6,969	+10.7
July	8,926	+28.1
August	12,061	+35.1
September	17,138	+42.1
October	24,158	+41.0
November	28,765	+19.1
December	37,335	+29.8
January 1945	47,649	+27.6
February	55,535	+16.6

To insure that all necessary steps were being taken to treat and discharge patients expeditiously, The Surgeon General initiated a special survey of the disposition problem, the replies to which are just now being received. A preliminary analysis reveals that many hospitals have taken steps to increase the working hours of their staffs, to hold board meetings at night, and to make such other changes in the administration of personnel as are required to cope more effectively with the rapidly increasing patient load. There is considerable evidence to indicate that the slowing-up of dispositions in December and January resulted from a swamping of the hospitals by the large inflow of evacuees. Hospital staffs strained to admit and treat new patients and had no time left to speed the disposition of patients. Despite the efforts of the hospitals to make their available personnel go "a little further", the majority still assess shortages of personnel as one of the crucial factors militating against the expeditious treatment and disposition of patients. Reports from the field also reveal that the vastly increased patient load frequently precipitated the need for certain alterations in facilities. These alterations usually relate to operative and adjunct facilities, especially in general hospitals designated for specialized surgery. The fact that the large evacuee inflow and its concomitant problems did not begin until December means that it will still be about sixty to ninety days before definite conclusions can be reached concerning the average rates of hospitalization for the type of evacuees presently arriving from the active theaters.

The expansion program approved by the War Department in January was reflected during the month of February in increases of approximately 12,000 effective general hospital beds and 15,500 convalescent hospital beds which became available to the Medical Regulating Officer. This last increase was particularly noteworthy in that it represented a gain in the total number of effective beds at convalescent hospitals from 18,300 in January to 33,750 in February, or approximately 84 percent.

The number of patients on furlough continues to increase. This fact reflects established policy which provides that every overseas patient whose physical condition permits be granted a furlough as soon after arrival as possible at the hospital where he will receive definitive treatment. In addition to these newly arrived patients, the furlough group also includes patients who have recovered sufficiently from operative or other types of treatment but who cannot yet be discharged from the hospital. There are many patients whose active hospitalization must be staged to permit the passage of time between one procedure and an-



HOSPITALIZATION

RESTRICTED

HOSPITALIZATION IN THE ZONE OF INTERIOR (Continued)

other. In some of these cases, furloughs at home may be preferable to continuous stays in either the general or convalescent hospital.

PATIENTS REMAINING IN GENERAL HOSPITALS PROPER  
End of February 1945

Command	Number of Hospitals	Authorized Patient Capacity*	Effective Beds**	Patients Remaining***		Beds Occupied****
				Number	Percent of Effective Beds	
Total	65	153,327	139,474	126,416	90.6	99,660
Service Commands						
First	3	8,600	6,700	6,264	93.5	5,205
Second	5	17,732	13,732	12,440	90.6	10,776
Third	5	10,375	10,375	7,675	74.0	6,037
Fourth	12	28,961	26,836	24,447	91.1	19,213
Fifth	8	14,564	14,564	14,169	97.3	10,828
Sixth	4	8,230	8,008	7,096	88.6	6,068
Seventh	5	13,434	13,434	11,841	88.1	8,829
Eighth	10	21,426	21,426	19,980	93.3	14,864
Ninth	12	27,005	21,399	19,652	91.8	15,447
The Surgeon General (Walter Reed)	1	3,000	3,000	2,852	95.1	2,393

- \* Sub-authorized by Office of Surgeon General on basis of total authorization of 169,500 from G-4.
- \*\* Authorized beds less 11,565 debarkation beds and 2,288 beds not yet available for use by Medical Regulating Officer.
- \*\*\* Exclusive of 24,208 patients remaining in convalescent hospitals.
- \*\*\*\* Exclusive of 17,099 beds occupied in convalescent hospitals.

The percentage of patients remaining to effective beds in the general hospitals was approximately the same in February as in January, exceeding 90 in both months. The eight general hospitals in the Fifth Service Command showed the highest percentage of patients remaining to effective beds, namely 97.3. The Third Service Command had the lowest percentage, 74.0, which largely reflected the marked increase in effective beds during the month; actually patients remaining in the general hospitals of the Third Service Command increased over 30 percent during February.

Convalescent Hospitals

Although many facilities have not yet been completely adapted for the accommodation of patients and a shortage still exists in scarce categories of trainer personnel, February witnessed substantial progress in the convalescent hospital program. There was a marked expansion in the patient capacities of the convalescent hospitals as indicated by the table below:

EFFECTIVE PATIENT CAPACITIES OF ASF CONVALESCENT HOSPITALS  
January-February 1945

Hospital	End of January	End of February
Total	18,300	33,750
Edwards	--	3,750
Upton	3,500	3,500
Story	1,800	1,800
Pickett	--	2,000
Butner	--	2,500
Welch	3,500	3,500
Wakeman	3,000	5,000
Percy Jones	2,500	5,000
Carson	2,000	3,000
Brooke	800	1,500
Mitchell	1,000	2,000
Old Farms Convalescent Home	200	200

RESTRICTED



**RESTRICTED**

## HOSPITALIZATION

### HOSPITALIZATION IN THE ZONE OF INTERIOR (Continued)

#### Station and Regional Hospitals

The troop strength served by station and regional hospitals continued to decline in February and this was reflected to some degree in a reduction in authorized and effective beds. The percentage of patients remaining (approximately the same as beds occupied in station and regional hospitals) amounted to 98.5 of effective beds, which indicates overall tight control on the use of station and regional hospital resources; if Chief of Transportation hospitals are excluded, the percentage of occupancy exceeded 101.

#### BEDS AUTHORIZED AND PATIENTS REMAINING IN STATION AND REGIONAL HOSPITALS End of February 1945

Command	Authorized Beds*	Effective Beds**	Patients Remaining		Beds Occupied ***
			Number	Percent of Effective Beds	
Army Service Forces - Total.	71,924	57,539	56,657	98.5	55,672
Service Commands - Total	64,564	51,651	52,302	101.3	51,338
Station Hospitals	32,677	26,142	24,452	83.5	24,287
First	220	176	71	40.3	71
Second	1,659	1,327	1,278	96.3	1,266
Third	2,399	1,919	1,703	88.7	1,673
Fourth	5,135	4,108	3,843	93.5	3,820
Fifth	1,008	807	372	46.1	360
Sixth	1,146	917	968	105.6	950
Seventh	2,093	1,675	1,172	70.0	1,161
Eighth	12,555	10,044	10,266	102.2	10,244
Ninth	5,669	4,535	4,158	91.7	4,121
MDW	793	634	621	98.0	621
Regional Hospitals	31,887	25,509	27,850	109.2	27,051
First	550	440	474	107.7	449
Second	1,034	827	1,163	140.6	1,112
Third	2,829	2,263	2,791	123.3	2,715
Fourth	12,350	9,880	9,762	98.8	9,482
Fifth	1,574	1,259	1,805	143.4	1,794
Seventh	2,750	2,200	2,437	110.8	2,406
Eighth	7,200	5,760	6,047	105.0	5,868
Ninth	3,600	2,880	3,371	117.0	3,225
Chief of Transportation-Total	7,360	5,888	4,355	74.0	4,334

\* Authorized by Commanding Generals of Service Commands or by Chief of Transportation.

\*\* Authorized beds by less an allowance for dispersion of 20 percent.

\*\*\* Difference between number of patients remaining and corresponding number of beds occupied represents number of patients temporarily absent from hospital on sick leave, furlough or AWOL.

#### Personnel

The personnel situation in the general hospital system continues tight, as evidenced by replies from the field that expeditious patient treatment and discharge has been delayed to some extent by personnel shortages. However, February did witness a reduction in personnel shortages to the following:

Total	20,844
Medical Corps	536
Nurses	3,231
Other Officers	2,371
Enlisted Men	14,706

The Surgeon General has recommended a redistribution of Medical Corps Officers and nurses among the theaters and major commands to help cope with the foregoing deficits. The

**RESTRICTED**



# HOSPITALIZATION

RESTRICTED

## HOSPITALIZATION IN THE ZONE OF INTERIOR (Continued)

WAC recruiting program is proving successful, and action has been taken by the War Department to increase the number of WAC companies in the general hospitals from the original 103 to 116. This WAC personnel will not be available for assignment to hospital duty in many cases for several months. The nurse recruiting program is being pushed aggressively and with good result but the requirement for nurses is so great as to result in a continuing marked shortage.

### Summary

The major aspects of ASF hospitalization as of the end of February can be summarized as follows:

- a. A high utilization of effective beds in station, regional and general hospitals.
- b. The increasing importance of convalescent hospitals in the hospitalization of evacuees.
- c. Increased assignments of personnel to the general hospital system. However, marked shortages in personnel still remain.

### SUMMARY ASF HOSPITALIZATION IN THE ZONE OF INTERIOR\* End of February 1945

Type of Hospital	Patient Capacity		Patients Remaining		Beds Occupied	Personnel Shortages***		
			Number	Percent of Effective Beds		MC	ANC	Total
	Authorized	Effective**						
Total	267,891	224,875	202,926	90.2	167,097	880	4,628	25,644
Station and Regional	64,564	51,651	52,302	101.3	51,338	344	1,397	4,800
General	153,327	139,474	126,416	90.6	99,660	251	3,233	17,263
Convalescent	50,000	33,750	24,208	71.7	17,099	285	- 2	3,581

\* Excludes station hospitals under the Chief of Transportation.  
\*\* Defined in two preceding tables.  
\*\*\* Shortages make no allowance for availability of 2,750 protected personnel, consisting of approximately 450 Medical Corps officers and 2,300 corpsmen, since this personnel must be supervised by American medical officers, and, therefore, is not equivalent to corresponding categories of American personnel.

RESTRICTED



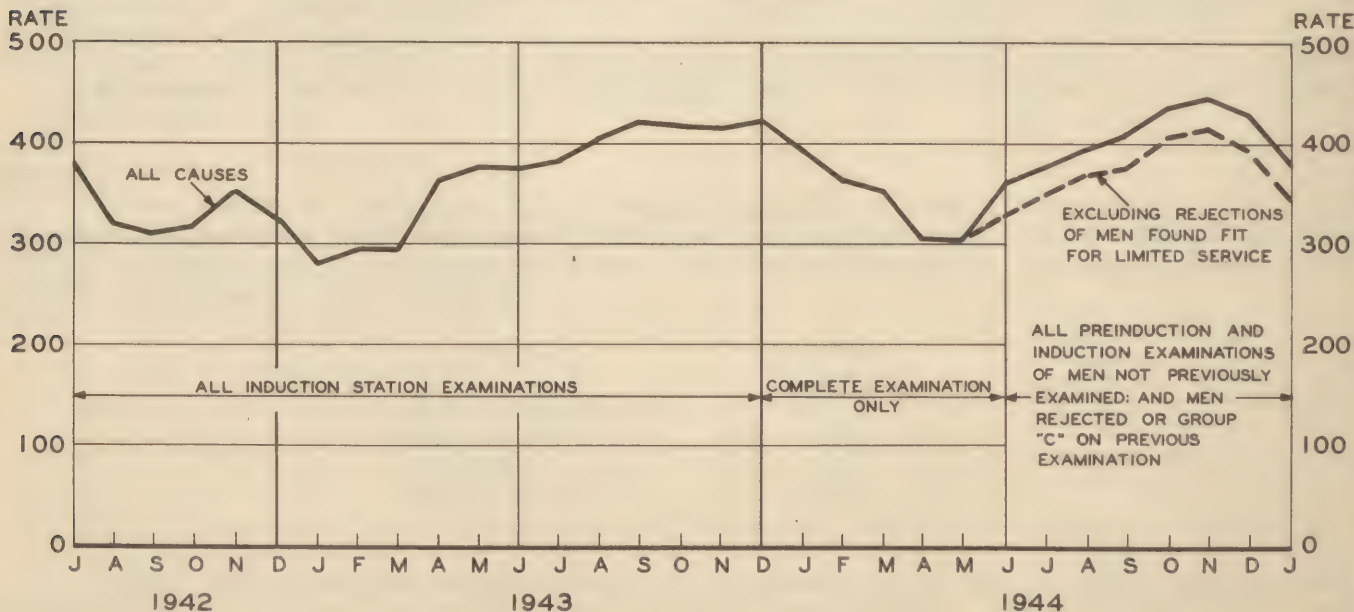
REJECTION AT ARMED FORCES INDUCTION STATIONS

The problem of determining the number of men to be called up by local boards in order to provide a predetermined number of fit replacements is of considerable interest, especially in view of the wide variations in the rejection rate in the past. The trend of the rejection rate since the middle of 1942 is shown in the chart below. The low rejection rate in September 1942 resulted from a radiogram dispatched 10 August 1942 stressing the necessity for the immediate induction of the maximum number of qualified registrants even though some might subsequently have to be discharged. A clarifying directive issued in October required that the utmost care be exercised at examinations to prevent the acceptance of individuals obviously unfit for service under MR 1-9 who would be discharged for disability within a short time. The rate rose sharply in November in consequence. The low level in the early months of 1943 reflects the induction for the first time of a large group of 18- and 19-year olds, following amendment of the Selective Service and Training Act in December 1942, and suspension of the induction of men who had reached their 38th birthday. The rise in the rejection rate later in 1943 was largely the result of the increasingly older average age of registrants examined, the mounting difficulties encountered by local boards in meeting their quotas, and the sending up for re-examination of progressively larger proportions of previously rejected men.

The decline in the rejection rate early in 1944 resulted in part from the induction of younger married men with children and in part from the necessity for less thorough examinations when an unprecedented volume of preinduction examinations was scheduled in order to reveal the size of the pool of acceptable men who might be called up if needed. Many of those examined were then, and still are, deferred in essential war industry. The very low rates of rejection in April and May resulted from limitations then placed on the induction of men over 26 years of age. In June more stringent tests were adopted for illiterates and the induction of men able to meet only limited service standards was suspended, with the result that the rejection rate rose sharply. The continued rise from July through November reflects in large part the emphasis placed on the need for combat replacements and also the return to more thorough examinations made possible by the much smaller number of examinations. A directive issued in December 1944 stressing the need for accepting all men who met the requirements of MR 1-9 for general service is believed to be the chief cause of the decrease in the rejection rate during that month and of the further decrease during January 1945.

Under the procedure in effect during 1943 and earlier years, registrants examined at armed forces induction stations were, with few exceptions, either inducted or rejected immediately on completion of the examination. In January 1944 this procedure was modified to provide for preinduction examinations to determine acceptability. Registrants were generally not forwarded for induction until their acceptability for military service had been previously determined at a preinduction examination. Registrants forwarded for induction within 90

REJECTIONS PER THOUSAND MEN EXAMINED AT INDUCTION STATIONS  
COMPLETE EXAMINATIONS ONLY





# MISCELLANEOUS

RESTRICTED

## REJECTION AT ARMED FORCES INDUCTION STATIONS (Continued)

days after having been found acceptable at a preinduction examination were given a physical inspection, while those forwarded after more than 90 days were given a complete re-examination and inducted or rejected accordingly.

Since August 1944 the results of examinations at armed forces induction stations have been reported according to the previous examination status of the registrant. The numbers examined and rejected, and the various rejection rates are as follows for the period from August through December 1944:

### EXAMINATIONS AND REJECTIONS BY PREVIOUS EXAMINATION STATUS OF REGISTRANTS

Previous Examination Status	Number of Examinations	Rejections*	
		Number	Percent
<u>Preinduction Examinations</u>			
<u>TOTAL</u> . . . . .	553,905	237,407	42.9
Not previously examined . . . . .	483,119	195,346	40.4
Previously examined, total . . . . .	70,786	42,061	59.4
Rejected previously . . . . .	63,247	39,038	61.7
Accepted previously . . . . .	7,539	3,023	40.1
<u>Induction Examinations</u>			
<u>TOTAL</u> . . . . .	458,028	53,040	11.6
Not previously examined . . . . .	31,155	9,997	32.1
Rejected previously . . . . .	4,899	2,041	41.7
Acceptable previously, total . . . . .	421,974	41,002	9.7
Reporting for physical inspections ** . . .	234,925	7,021	3.0
Reporting for complete re-examination ** . .	187,049	33,981	18.2

\* Since 1 June 1944 limited service men have not been inducted, and registrants qualified only for limited service have therefore been included with rejections.

\*\* Registrants who report within 90 days of acceptance at a preinduction examination are given a physical inspection while registrants reporting after 90 days are completely re-examined.

The rejection rates for August through December 1944 provide a basis for estimating the proportion of a group of registrants not previously called up by their local boards who may ultimately be expected to qualify for general military service. The problem is one of tracing a group of men not previously examined from their first screening by local boards, through the various examinations at armed forces induction stations, to their final acceptance for general service or rejection. The rejection rate at first examination for a group of men not previously examined will be higher than the percentage of men ultimately rejected in the group because re-examination of the rejected men will salvage a certain proportion of them. A rejection rate developed from examinations of men not previously examined can therefore be regarded as an upper limit to the true rejection rate. It is difficult to estimate the proportion of all rejected men who may ultimately be salvaged, because accurate data are not available as to how many of a group of rejected men may eventually be sent up for re-examination. Men with irremediable defects will constitute a large majority of the rejected men so that perhaps not more than 25 percent of all rejected men are likely to be sent up for re-examination. Of those sent up for re-examination about 40 percent have been salvaged for military service.

On the basis of the experience during the last five months of 1944, it is estimated that a group of 1,000 men of the same age distribution and general characteristics as those examined during this period would yield about 615 men acceptable for general military service and about 385 rejects. The drop in the rejection rate at induction station examinations during the month of January 1945 indicates that, under the conditions and procedures in effect then, about 650 registrants would ultimately be inducted out of every 1,000 men called up for the first time by their local boards. It must be remembered, however, that the rejection rate at induction station examinations is extremely sensitive to changes in administrative policy, changes in the age distribution of the men examined, and various other factors so that estimates made on the basis of one set of conditions provide a poor guide to future experience in the face of entirely different conditions.

RESTRICTED



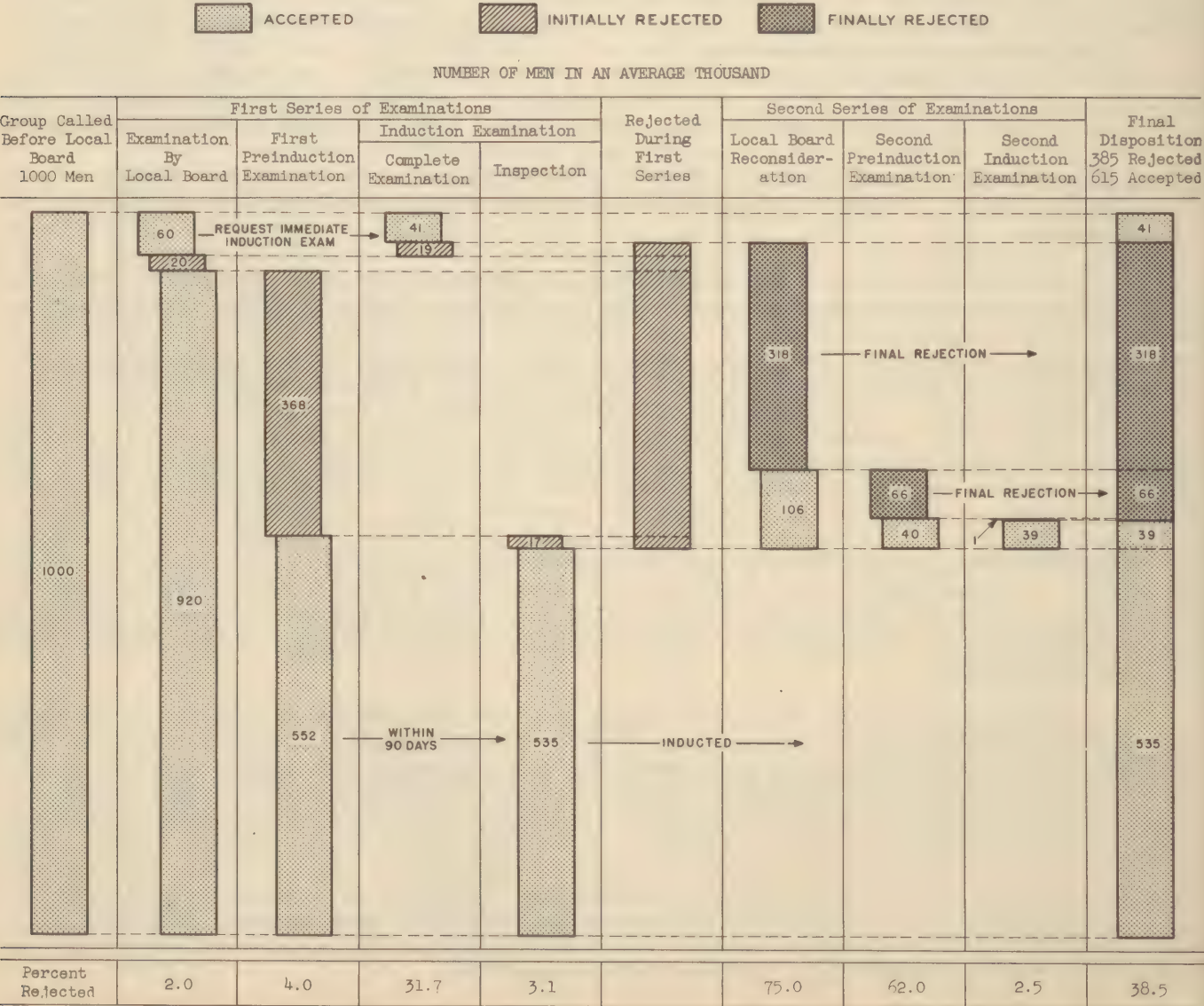
REJECTION AT ARMED FORCES INDUCTION STATIONS (Continued)

The accompanying chart traces the progress of a group of 1,000 average examinees through the stages of examination, showing the results at each stage as well as the final outcome. The chart is based on experience during the last five months of 1944 and on the assumption that all men found acceptable at the preinduction examination are forwarded for induction within 90 days, although in actual fact a large proportion are forwarded after 90 days. However, in the long run the difference should be small, representing merely the number of disqualifying defects acquired or brought to light during the intervening period.

It may be observed from the graphic analysis below that, if the first induction station examination had been the deciding factor on whether a man who had passed his local board screening was to be inducted or rejected, the number inducted out of each 1,000 screened at local boards would have been 593 (552 + 41) and the number rejected 407, before taking account of any men salvaged through re-examination of rejects. Certain of those rejected at the first examination are rejected because of temporary defects and if re-examinations were confined to this group the amount of work involved in examining men for induction would be considerably reduced. The net result in terms of the proportion of men who are eventually inducted would not differ materially from the results achieved under the present cumbersome pre-induction procedure. This suggests that consideration might well be given to the advisability of reverting to the simpler procedure in effect prior to 1944, when men were inducted or rejected on the basis of their first induction station examination. An adequate period of time might be allowed after induction to permit personal affairs to be put in order before the inductee was required to report to a reception center.

PROGRESS OF 1000 MEN CALLED BEFORE LOCAL BOARDS FOR THE FIRST TIME

AUGUST-DECEMBER 1944





## STATISTICAL TABLES

CONFIDENTIAL

## STATISTICAL TABLES

The tables below and on the following pages present admission rates for selected causes in the overseas theaters. The rates include cases admitted to hospital or confined to quarters for a day or more, and have been derived from MD Forms 86ab (now AGO Form 8-122), both regular and telegraphic, submitted to The Surgeon General from each overseas theater or lesser command. Only the major overseas areas are shown separately, but the total overseas rates are based upon a complete consolidation. Except for wounded, the rates for each month are based upon the experience of four or five weeks depending upon the number of Fridays in a month. For wounded in action the rates pertain to calendar-month periods and are derived from The Adjutant General's report, Battle Casualties of the Army, which tabulates hospital admissions only. Rates computed from incomplete reports are so noted, and those derived from the weekly telegraphic 86ab reports are distinguished from those obtained from the regular monthly report. Average rates for 1944 are shown for only those theaters which have submitted a complete set of regular 86ab reports for the year.

The malaria rates are for diagnosed malaria only, and include both primary attacks and recurrences insofar as these are reported as malaria, a variable amount, differing from theater to theater, being reported as fever of undetermined origin. The rates for the Army in the continental United States reflect only infections acquired in the United States. The venereal disease rates represent the data of the 86ab report rather than the monthly venereal disease statistical report, which generally yields somewhat lower rates, and for the United States, exclude cases contracted prior to induction. The transfer of strength from the Mediterranean to the European Theater is believed to have caused some error in the reports from the former area for October and November, one which takes the form of too little strength for the admissions reported. Tentative neuropsychiatric admission rates are presented for 1944. Not systematically reported on the 86ab until late in 1943, these rates may not be as firm as those for communicable diseases. With respect to the table on fever of undetermined origin, many of the admissions initially reported as such are later given specific diagnoses often malaria. Since the system of reporting does not make it possible to subtract such cases from the undiagnosed category, a certain amount of dual reporting exists.

For those diagnoses which were shown in tabular form in HEALTH for January 1945, the theater experience prior to July 1945 has been summarized and separate monthly rates are shown only for July and subsequent months.

WOUNDED IN ACTION, AS REPORTED TO THE ADJUTANT GENERAL  
Hospital Admissions per Thousand Men per Year

Month and Year	OVERSEAS COMMANDS								
	Total f/ Overseas	North American	Latin American	ETO a/	MTO	POA	SWPA	CBI	ME and PGC
1943 Average	23	6	e/	7	62	18	9	4	4
1944 - Jan	29			4	115	5	10	0	4
Feb	39			6	144	35	6	1	0
Mar	24			4	65	37	29	11	1
Apr	13			6	38	5	12	12	17
May	42			5	182	1	25	8	23
Jun	115			193	100	55	45	41	12
Jul	142			269	94	42	24	24	13
Aug	99			188	70	20	10	7	-
Sep	111			172	165	33	4	2	0
Oct	94			114	173	28	60	2	-
Nov	129			225	37	13	56	3	-
Dec	115			189	28	2	57	5	-
1944 Average	c/	d/	e/	c/	c/	c/	c/	c/	c/

a/ Excluding Iceland.

c/ Data not yet available.

d/ Only 5 men reported as wounded in 1944.

e/ Only 8 men reported as wounded 1 January 1943 through 31 December 1944.

f/ Including casualties among men en route overseas.

- Is used to denote no admissions, 0 to denote a rate of less than 0.5.

CONFIDENTIAL



**RESTRICTED**

# STATISTICAL TABLES

## STATISTICAL TABLES (Continued)

### ADMISSIONS TO HOSPITAL AND QUARTERS Rates Per Thousand Men Per Year

Month and Year	United States	OVERSEAS COMMANDS								
		Total	Alaska	Carib- bean	ETO <u>a</u> /	MTO	POA	SWPA	Asiatic	ME and PGC
ALL DISEASE										
1942 Average	664	676	667	823	693	452	519	821	1,048	1,330
1943 Jan-Jun	807	873	737	690	887	723	1,008	1,289	957	1,023
Jul-Dec	675	899	533	649	822	1,065	942	921	1,004	1,177
1943 Average	739	889	624	670	837	943	971	1,046	991	1,107
1944 Jan-Jun	619	695	566	528	578	812	600	902	967	949
Jul	473	654	367	561	347	998	474 <u>b</u> /	877	1,535	1,073
Aug	472	609	377	555	329	845	500 <u>b</u> /	904	1,520	978
Sep	506	581	341	528	305	844	659 <u>b</u> /	816	1,228	896
Oct	511	644	341	532	467	930	545 <u>b</u> /	771	1,154	775
Nov	494	627	387	532	538	810	443 <u>b</u> /	729	897	729
Dec	513	<u>c</u> /	298	512	564	862	450 <u>b</u> /	(881) <u>b</u> /	782	645
Jul-Dec	495	<u>c</u> /	351	536	440	880	513 <u>b</u> /	<u>c</u> /	1,152	842
1944 Average	563	<u>c</u> /	478	531	492	846	561 <u>b</u> /	<u>c</u> /	1,077	896
1945 Jan	603	669	337	529	(619)	878	(458)	(917)	(673)	(630)
Feb	625 <u>b</u> /	<u>c</u> /	<u>c</u> /	<u>c</u> /	<u>c</u> /	<u>c</u> /	<u>c</u> /	<u>c</u> /	(601)	(539)

### NONBATTLE INJURY

1942 Average	91	123	152	107	109	96	104	176	80	158
1943 Jan-Jun	80	150	193	115	130	154	135	191	103	144
Jul-Dec	81	129	173	93	91	145	128	160	77	136
1943 Average	80	136	182	105	100	149	131	171	84	140
1944 Jan-Jun	69	114	145	75	85	145	118	151	95	107
Jul	72	125	114	63	126	146	96b/	141	86	105
Aug	71	105	103	65	88	125	86b/	149	88	88
Sep	67	101	107	61	73	137	107b/	144	81	95
Oct	66	108	95	60	87	135	116b/	142	98	88
Nov	61	111	94	56	106	131	111b/	117	115	81
Dec	55	c/	84	59	136	107	101b/	(128)b/	111	94
Jul-Dec	66	c/	100	61	105	131	102b/	c/	97	92
1944 Average	67	c/	127	68	97	138	111b/	c/	96	99
1945 Jan	55	130	102	60	(148)	103	(98)	(121)	(99)	(66)
Feb	50b/	c/	c/	c/	c/	c/	c/	c/	(93)	(66)

- is used to denote no admissions, 0 to denote a rate of less than 0.5.

a/ Excluding Iceland.

b/ Based on Incomplete Reports.

( ) Telegraphic Reports.

c/ Data not yet available.

**RESTRICTED**



# STATISTICAL TABLES

RESTRICTED

## STATISTICAL TABLES (Continued)

### ADMISSIONS TO HOSPITAL AND QUARTERS Rates Per Thousand Men Per Year

Month and Year	United States	OVERSEAS COMMANDS								
		Total	Alaska	Carib- bean	ETOa/	MTO	POA	SWPA	Asiatic	ME and PGC
ALL VENEREAL DISEASE										
1942 Average	39	32	7	74	38	36	12	32	64	80
1943 Jan-Jun	25	31	4	67	50	41	6	21	58	64
Jul-Dec	27	36	2	43	41	65	5	12	50	71
1943 Average	26	34	3	56	43	56	5	15	52	68
1944 Jan-Jun	30	37	3	33	26	96	6	9	53	60
Jul	35	38	7	34	22	117	4b/	7	50	50
Aug	36	36	6	31	21	121	4b/	7	47	50
Sep	37	44	6	30	35	125	5b/	6	53	55
Oct	38	56	7	37	56	140	5b/	5	50	62
Nov	39	47	7	42	48	115	3b/	4	43	79
Dec	39	c/	8	29	49	134	4b/	c/	53	72
Jul-Dec	37	c/	7	33	40	125	4b/	c/	50	62
1944 Average	33	c/	5	33	35	111	5b/	c/	51	60
1945 Jan	47	c/	6	29	c/	124	c/	c/	c/	c/
Feb	43b/									

### DIAGNOSED MALARIA

1942 Average	0.6	33	0	99	0	11	12	52	165	127
1943 Jan-Jun	0.2	86	0	50	0	12	164	330	116	90
Jul-Dec	0.3	101	0	23	3	77	241	201	205	150
1943 Average	0.2	96	0	37	3	54	208	245	181	123
1944 Jan-Jun	0.1	43	0	16	10	61	67	75	113	66
Jul	0.2	50	0	20	18	81	21b/	59	265	121
Aug	0.2	47	0	15	12	91	14b/	48	310	71
Sep	0.2	31	0	11	6	74	15b/	42	240	51
Oct	0.2	33	0	13	6	61	10b/	37	255	40
Nov	0.1	23	0	8	5	38	9b/	32	165	23
Dec	0.1	c/	0	6	6	25	6b/	(41)b/	112	15
Jul-Dec	0.2	c/	0	12	8	63	13b/	c/	216	52
1944 Average	0.2	c/	0	14	9	62	43b/	c/	174	59
1945 Jan	0.1	c/	0	7	c/	19	c/	c/	c/	c/
Feb	0.2									

- Is used to denote no admissions, 0 to denote a rate of less than 0.5.

a/ Excluding Iceland.

b/ Based on Incomplete Reports.

( ) Telegraphic Reports.

c/ Data not yet available.

RESTRICTED



**RESTRICTED****STATISTICAL TABLES**STATISTICAL TABLES (Continued)ADMISSIONS TO HOSPITAL AND QUARTERS  
Rates Per Thousand Men Per Year

Month and Year	United States	OVERSEAS COMMANDS								
		Total	Alaska	Carib- bean	ETOa/	MTO	POA	SWPA	Asiatic	ME and PGC
COMMON RESPIRATORY AND INFLUENZA										
1942 Average	243	159	244	113	287	151	89	146	150	197
1943 Jan-Jun	310	164	294	87	374	125	90	127	143	182
Jul-Dec	188	190	164	112	420	151	83	99	165	217
1943 Average	247	181	222	99	409	142	86	108	159	201
1944 Jan-Jun	198	174	245	84	225	185	97	90	177	254
Jul	66	89	94	85	64	114	61b/	88	248	140
Aug	67	80	98	85	56	107	62b/	82	195	182
Sep	81	88	111	81	69	110	88b/	76	174	191
Oct	92	113	127	68	101	186	85b/	64	175	191
Nov	93	111	134	77	112	154	61b/	78	147	185
Dec	115	c/	72	68	122	166	63b/	c/	141	200
Jul-Dec	85	c/	105	77	92	138	70b/	c/	176	182
1944 Average	147	c/	188	81	142	162	85b/	c/	176	219
1945 Jan	167	c/	106	67	c/	190	c/	c/	c/	c/
Feb	192	c/								

## DIARRHEA AND DYSENTERY

1942 Average	8	28	5	19	17	33	34	57	120	185
1943 Jan-Jun	8	69	11	16	13	139	49	72	130	169
Jul-Dec	15	65	5	16	11	128	38	69	152	171
1943 Average	12	66	8	16	12	132	43	70	146	170
1944 Jan-Jun	9	35	3	13	11	41	28	58	182	101
Jul	12	57	3	15	9	114	41b/	56	326	159
Aug	11	48	6	9	10	76	40b/	57	280	178
Sep	10	38	3	10	12	66	23b/	41	186	159
Oct	10	34	4	9	12	68	19b/	37	140	106
Nov	8	32	4	15	14	43	19b/	54	105	129
Dec	7	c/	2	13	22	33	20b/	113b/	100	55
Jul-Dec	10	c/	3	12	14	67	28b/	c/	180	129
1944 Average	9	c/	3	13	13	54	28b/	c/	181	115
1945 Jan	8	c/	1	11	c/	20	c/	c/	c/	c/
Feb	7									

- is used to denote no admissions, 0 to denote a rate of less than 0.5.

<sup>a</sup>/ Excluding Iceland.<sup>b</sup>/ Based on Incomplete Reports.<sup>( )</sup> Telegraphic Reports<sup>c</sup>/ Data not yet available.**RESTRICTED**



## STATISTICAL TABLES

~~CONFIDENTIAL~~

## STATISTICAL TABLES (Continued)

ADMISSIONS TO HOSPITAL AND QUARTERS  
Rates Per Thousand Men Per Year

Month and Year	United States	OVERSEAS COMMANDS								
		Total	Alaska	Carib- bean	ETOa/	MTO	POA	SWPA	Asiatic	ME and PGC
FEVER OF UNDETERMINED ORIGIN										
1943 Jan-Jun	<u>c/</u>	45	0	74	1	16	17	244	54	17
Jul-Dec	<u>c/</u>	56	0	52	1	108	20	125	77	26
1943 Average	<u>c/</u>	52	0	64	1	75	19	166	71	21
1944 Jan	<u>c/</u>	32	0	41	1	51	18	179	46	16
Feb	<u>c/</u>	28	1	41	0	33	22	116	28	9
Mar	<u>c/</u>	34	1	34	2	58	34	102	36	6
Apr	<u>c/</u>	36	1	38	1	61	37	101	62	10
May	<u>c/</u>	34	1	34	1	52	30	96	87	24
Jun	<u>c/</u>	41	1	33	2	80	12	97	118	21
Jan-Jun	<u>c/</u>	35	1	37	1	57	26	102	69	16
Jul	<u>c/</u>	60	1	50	2	133	8 <u>b/</u>	114	209	66
Aug	<u>c/</u>	57	0	50	5	122	31 <u>b/</u>	95	247	52
Sep	<u>c/</u>	44	0	43	1	97	16 <u>b/</u>	80	184	34
Oct	<u>c/</u>	34	-	14	1	66	8 <u>b/</u>	60	213	30
Nov	<u>c/</u>	29	0	15	1	48	8 <u>b/</u>	71	133	27
Dec	<u>c/</u>	<u>c/</u>	0	13	4	38	5 <u>b/</u>	<u>c/</u>	97	21
Jul-Dec	<u>c/</u>	<u>c/</u>	0	31	3	85	13 <u>b/</u>	<u>c/</u>	174	37
1944 Average	<u>c/</u>	<u>c/</u>	1	34	2	71	20 <u>b/</u>	<u>c/</u>	131	27
1945 Jan	<u>c/</u>	<u>c/</u>	0	20	<u>c/</u>	39	<u>c/</u>	<u>c/</u>	<u>c/</u>	<u>c/</u>
Feb	<u>c/</u>									

## NEUROLOGICAL AND PSYCHIATRIC DISORDERS

1944 Jan	27	30	12	23	36	22	29	44	29	30
Feb	27	29	10	24	25	36	25	44	29	28
Mar	27	27	12	22	19	33	29	45	23	27
Apr	26	24	11	21	18	26	25	43	19	23
May	32	29	9	16	20	48	22	52	16	30
Jun	33	35	8	19	29	50	26	53	24	27
Jan-Jun	29	29	11	21	24	37	26	48	23	27
Jul	32	59	10	16	84	52	27b/	58	16	31
Aug	36	50	12	18	75	28	25b/	48	17	21
Sep	46	41	13	25	40	50	32b/	53	16	15
Oct	48	56	13	23	65	82	32b/	39	21	21
Nov	47	60	13	27	85	47	28b/	41	23	16
Dec	47	c/	12	22	71	39	29b/	c/	20	26
Jul-Dec	45	c/	12	22	69	50	29b/	c/	19	22
1944 Average	36	c/	12	21	52	43	27b/	c/	20	25
1945 Jan	50		14	25	c/	32	c/	c/	c/	c/
Feb	c/									

- is used to denote no admissions, 0 to denote a rate of less than 0.5.

a/ Excluding Iceland. b/ Based on Incomplete Reports. c/ Data not yet available.

~~CONFIDENTIAL~~

RESTRICTED



